

AN ANALYSIS OF THE LEADER BEHAVIORS OF CAREER-BOUND  
AND PLACE-BOUND PUBLIC SCHOOL SUPERINTENDENTS  
IN IOWA

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A Dissertation  
Presented to  
The School of Graduate Studies  
Drake University

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of the Requirements for the Degree  
Doctor of Education

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by  
Leland R. Wolf  
November 1974

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by  
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AN ANALYSIS OF THE LEADER BEHAVIORS OF CAREER-BOUND  
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An abstract of a Dissertation by  
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November 1974  
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Two types of superintendents are defined in the literature. Place-bound superintendents are promoted from within their present systems; career-bound superintendents are elected from outside. This study was made to determine whether the two career types exhibit different leader behaviors.

The problem. The problem investigated was: Are there differences in either Initiating Structure or Consideration behaviors between career- and place-bound superintendents?

Procedure. A Career Patterns Questionnaire was designed and administered to all Iowa public school superintendents. Based upon the returns from 418 (ninety-three percent) of them, two samples were drawn, one of each career type, and were stratified according to school district enrollment. The Leader Behavior Description Questionnaire was administered to selected administrative staff members of the 174 subject superintendents. Five variables were analyzed: years in present position; age at first superintendency; Structure score; Consideration score; and total LBDQ score.

Findings. Findings included:

- 1) Place-bound superintendents, compared to career-bound: a) had significantly longer terms in office; b) were significantly older in the largest and smallest districts when first attaining the superintendency; and c) were mildly higher in LBDQ scores, except in the next-to-smallest schools.
- 2) There were no significant differences in Structure, Consideration, or total LBDQ scores between the two career types.
- 3) Length of term in office was mildly negatively correlated with LBDQ scores. This negative correlation was stronger for place-bound men and for all Structure scores.
- 4) Age at first superintendency was not strongly correlated with any of the leader behavior scores for either career type.
- 5) In the largest schools, 25.0 percent of superintendents were place-bound; in the smallest, 13.2 percent were place-bound.

6) Sixty-eight percent of all place-bound superintendents had been high school principals immediately before attaining their present superintendencies.

7) For all superintendents, Structure and Consideration scores were highly correlated.

8) Eighty percent of career-bound superintendents in the largest schools had previously been superintendents, whereas forty-six percent of career-bound superintendents in the smallest schools had previously been superintendents.

#### Conclusions. Conclusions included:

1) Place-bound superintendents wait longer for promotion than career-bound men, especially in the largest and smallest schools, and stay longer in their superintendencies.

2) The hypotheses of no differences in Initiating Structure or Consideration scores must be retained.

3) Total LBDQ scores are not significantly different between the two career types.

4) Length of term in office adversely affects administrative subordinates' perceptions of their superintendents' leader behaviors, especially Structure. This effect is accentuated by place-boundedness.

5) Age at first superintendency has no appreciable relationship to leader behavior scores.

6) Frequency of occurrence of place-boundedness is directly related to school district size.

7) The high school principalship is the main route to the superintendency for place-bound men.

8) Administrative staffs do not view Initiating Structure and Consideration as separate aspects of their leaders' behavior.

9) The smallest schools may serve as training grounds for career-bound superintendents.

#### Recommendations. Recommendations were:

1) This study should be replicated, designed so that a one-tailed test may be used, with ratings secured from board members and teachers to test for a halo effect among the administrative staffs of place-bound superintendents.

2) Superintendents, especially place-bound, should be aware that perceived levels of Initiating Structure and Consideration decline as their tenures increase.

3) Place-bound superintendents should consider moving after gaining experience in their home districts.

4) The superintendency in the smallest districts should be made more attractive to career-bound men, so that they stay longer.



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## Chapter 1

### INTRODUCTION TO THE STUDY

Perhaps the oldest and most important social role in our society is that of the leader.<sup>1</sup> One of the most important leadership roles at the community level is that of the public school superintendent. Superintendents are responsible for the operation of educational programs and physical plants, for personnel administration, and for the fiscal soundness of their districts. These multiple responsibilities place heavy, often conflicting demands upon the superintendent's role, leading to the speculation that the superintendency is one of the most cross-pressured roles in society.<sup>2</sup> Certainly, the study of factors affecting the performance of the superintendent in fulfilling his leadership role is a worthy undertaking.

### RATIONALE

One crucial variable affecting the performance of the superintendent may be his behavior in the process of

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<sup>1</sup>Elmer H. Wilds and Kenneth V. Lottich, The Foundations of Modern Education (fourth edition; New York: Holt, Rinehart and Winston, 1970), p. 25.

<sup>2</sup>Neal Gross, Ward Mason, and Alexander McEachern, Explorations in Role Analysis: Studies of the School Superintendency Role (New York: Wiley, 1958), p. 249.



carrying out his leadership duties. The measurement of leaders' behavior has been the subject of extensive research. An instrument, called the Leader Behavior Description Questionnaire (hereinafter called the LBDQ) has been developed to measure certain dimensions of leader behavior.<sup>1</sup> Using the LBDQ, researchers have found these dimensions of leader behavior to be related to many situational variables.<sup>2</sup>

Since superintendents' leader behaviors have been shown to be related to certain organizational outcomes, study of factors affecting these leader behaviors is warranted. One of these factors may be that of career orientation.

Carlson has written of the differences in style and performance between superintendents of two opposing career orientations, which he has termed "career-bound" and "place-bound."<sup>3</sup> Differences were found between the two types of career orientation in such matters as length of tenure, number and content of rules made, salary levels, adoption of innovations, and prestige ascribed to the superintendent by

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<sup>1</sup>Ralph Stogdill and Alvin Coons, eds., Leader Behavior: Its Description and Measurement, research monograph no. 88 (Columbus: College of Administrative Science, Ohio State University, 1957).

<sup>2</sup>This research is reported in Chapter 2 of this study.

<sup>3</sup>Richard O. Carlson, School Superintendents: Careers and Performance (Columbus: Charles E. Merrill, 1972).

other superintendents.

If career orientation does indeed have an effect on leader behavior, the leader behaviors of career- and place-bound superintendents, measured by the LBDQ, should be significantly different. Although there have been studies of the relationship between career orientation and certain traits of leaders, little study has been made of the leader behaviors of career- and place-bound superintendents, using the LBDQ.<sup>1</sup> If it can be shown that the leader behaviors of superintendents are affected by their career orientations, a new understanding of the forces affecting superintendents' performance will have been gained.

#### PURPOSE OF THE STUDY

The purpose of this study was to measure the leader behaviors of selected Iowa public school superintendents who conformed to Carlson's definitions of career-bound and place-bound orientations to ascertain any relationships.

#### IMPORTANCE OF THE STUDY

Results of this investigation will be of importance to Boards of Education, University Departments of Educational Administration, and to both prospective and practicing school

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<sup>1</sup>For example, a search of dissertation abstracts revealed no investigations reported using the LBDQ to analyze the leader behaviors of career- and place-bound superintendents, as defined using Carlson's criterion of origin.

superintendents.

Boards of Education are sometimes faced with decisions about whether to fill vacant superintendencies by promotion from within or whether to hire from outside their districts. Evidence from this study may help them make their decisions.

Departments of educational administration will find the results of this study useful, not only for the new knowledge gained, but also because they are frequently called upon to assist in the selection of new superintendents. Results of the study will provide input in counseling prospective superintendents about whether to seek placement within their present districts or to accept election in a different school district.

Present and prospective superintendents will find the information from this study useful in the fulfilling of their tasks as they come to realize that their behavior as leaders may be affected by their career orientations.

#### DEFINITIONS OF TERMS

Six terms with rather specific meanings were used in the study. They are:

Career orientation. This phrase refers to attitude toward a career as superintendent. A superintendent may be oriented toward pursuing a career regardless of location, or he may be oriented toward remaining in one location regardless of career opportunities elsewhere. Two polar types of

career orientation are described below.

Career-bound. This term refers to a superintendent who obtained his present superintendency through election from a district other than the one he now administers. As Carlson stated:

The man promoted from outside puts career above place. He leaves the home school system and takes a superintendency elsewhere. He is bound not to a place, but to a career. Superintendents advanced to the superintendency from outside the containing organization are called career-bound.<sup>1</sup>

Place-bound. This term describes a superintendent who, according to Carlson:

. . . seems to want to career [sic] as superintendent only if he can have it in his home school system. He puts place of employment above a career as superintendent. Superintendents promoted from within are called place-bound.<sup>2</sup>

Leader behavior. This term refers to the acts in which a leader engages, and is not to be confused with leadership. A person may or may not display the traits of effective leadership while behaving in the manner of a leader. Leader behavior refers to specific acts, whereas leadership implies the ability to govern effectively.

Initiating Structure. The LBDQ measures two aspects of leader behavior. The first aspect, or dimension, is called Initiating Structure, and refers to the leader's actions in delineating the relationships between himself and

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<sup>1</sup>Carlson, p. 41.

<sup>2</sup>Ibid., p. 40.

his subordinates, and in establishing patterns of organization and methods of procedure.

Consideration. This is the second dimension measured by the LBDQ, and refers to behaviors showing friendship, trust, respect, and warmth between the leader and his subordinates.

#### HYPOTHESES OF THE STUDY

The study was designed to answer the question: Are there any differences in either Initiating Structure behaviors or Consideration behaviors between career- and place-bound public school superintendents in Iowa?

Stated as a pair of null hypotheses, the question became:

Hypothesis I: There is no difference in Initiating Structure behavior between career-bound and place-bound public school superintendents in Iowa.

Hypothesis II: There is no difference in Consideration behavior between career-bound and place-bound public school superintendents in Iowa.

In order to retain or reject these hypotheses, it was first necessary to answer the following questions:

1. Who are the career- and place-bound superintendents in Iowa, according to Carlson's criterion?
2. Are there differences between the two career types in Initiating Structure behavior?
3. Are there differences between the two career types in Consideration behavior?

## METHODOLOGY

The study was conducted in three parts: the review of literature and research, data gathering, and data analysis. These three phases of the study are described below.

### Review of Literature and Research

Current and pertinent literature pertaining to leadership and leader behavior, especially as they were related to career orientation, were reviewed and are presented in Chapter 2 of this report. The literature reviewed includes published research on the topics under study, as well as unpublished research, books, and journal articles.

### Data Gathering

Two questionnaires were used to gather data. The first, a Career Patterns Questionnaire, gathered information about the superintendents' present positions, including place of origin (inside or outside the school district) prior to entering their present positions.

From the data obtained by the Career Patterns Questionnaire, two samples of superintendents were drawn, one of place-bound and one of career-bound superintendents. These samples were stratified according to school district size.

The second questionnaire, the LBDQ, was administered to selected members of the administrative staffs of the subject superintendents. Within each stratum of school district size, an attempt was made to administer the LBDQ to persons

occupying equivalent positions.

### Data Analysis

The returned LBDQ's were hand scored, and the data were later keypunched for computer processing. Correlations were calculated between five variables: years in present position; age at first superintendency; Initiating Structure average score; Consideration average score; and total average score. These intercorrelations were calculated for all superintendents, for career-bound superintendents only, for place-bound superintendents only, and for career-bound and place-bound superintendents by size stratum of school district.

Data for each variable were subjected to analysis of variance, testing for interaction between career orientation and school district size. Where measureable interaction was found, a test for simple main effects was used in order to more accurately locate the sources of variance. Pairwise comparisons between means were made, where appropriate, using Scheffe's S method.<sup>1</sup> Means of variables for which interaction was found were tested for significant differences through computation of an f value for the difference between means. Means of the variables for which no marked interaction was found were tested for significant differences through calculation of Student's t.

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<sup>1</sup>Roger E. Kirk, Experimental Design: Procedures for the Behavioral Sciences (Belmont: Brooks/Cole Division, Wadsworth Publishing Co., 1968), pp. 180-1.

## LIMITATIONS

Four limitations upon the use and interpretation of the data resulting from this study must be drawn. First, the study is limited in scope to selected public school superintendents in Iowa.

Secondly, the LBDQ measures leader behavior, not leadership (see Definitions of Terms). The results of this study cannot be assumed to indicate relative degrees of educational leadership among career- or place-bound superintendents.

A third limitation is that the accuracy of the LBDQ scores as measures of a given superintendent's leader behavior is limited to the accuracy of perception of those leader behaviors by members of that superintendent's administrative staff.

Lastly, the LBDQ is considered to be only an intermediate criterion for evaluating the effectiveness of a superintendent's behavior.<sup>1</sup> Absolute judgments regarding the effectiveness of a superintendent, based upon his LBDQ scores alone, cannot reliably be made.

## PLAN OF THIS REPORT

Chapter 1 has presented an overview of the study, in order that the information presented in succeeding chapters

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<sup>1</sup>Andrew W. Halpin, Theory and Research in Administration (New York: Macmillan, 1966), p. 122.



may be more meaningful. Chapter 2 reports the findings from the review of literature. A more detailed description of the methodology used in the study is presented in Chapter 3. The data collected and analyzed during the study are presented in Chapter 4. Chapter 5 will include a brief summary of the study, a summary of major findings, and conclusions and recommendations based upon those findings.

## Chapter 2

### REVIEW OF THE LITERATURE

Peter Drucker has used the term "employee society" to emphasize the relationship between employers and employees as being a determinant of the character of our society.<sup>1</sup> With such a view of our social system, the importance of the role of the leader is evident. The study of leaders and of leadership has been extensive and varied. It will not be the purpose of this chapter to attempt to detail the entire history and breadth of leadership study. Instead, those aspects of leadership studies which have application to the topic of this report will be presented in three parts. First, the history of the concept of leadership as it has evolved through time will be presented in order to place this study in its proper context. The second part will concern itself with studies, using the Leader Behavior Description Questionnaire, which have application to the leader behaviors of superintendents. The last part of the chapter will deal with the studies conducted by Carlson and others of career-bound and place-bound leaders.<sup>2</sup>

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<sup>1</sup>Peter F. Drucker, "The Employee Society," American Journal of Sociology, LXIII (January, 1952), 358-63.

<sup>2</sup>Richard O. Carlson, School Superintendents: Careers and Performance (Columbus: Charles E. Merrill, 1972).

## AN EVOLVING CONCEPT OF LEADERSHIP

Folk tales and legends originating even before the dawn of recorded history give testament to man's enduring admiration for and awe of his leaders. The thousands of years of recorded history are studded with the exploits of great leaders. The acts of these leaders determined the course of history, not only for the societies they led, but for succeeding civilizations.

Because the ancients recognized the need for effective leadership, the history of leadership theory is a long one, and it is not surprising to find reference to the preparation of leaders in early literature. Some authors have speculated that the importance of training effective leaders may have led to the establishment of the first primitive educational systems.<sup>1</sup>

Perhaps the first to write about the selection and training of leaders was Plato.<sup>2</sup> He believed that leaders should be brave, noble, keen of intellect, should demonstrate capacity for memorization, display an even temperment, be magnanimous, and be of sound mind and body. Training of prospective leaders would begin during youth and continue

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<sup>1</sup>Elmer H. Wilds and Kenneth V. Lottich, The Foundations of Modern Education (fourth edition; New York: Holt, Rinehart and Winston, 1970), p. 13.

<sup>2</sup>Dialogues of Plato, III, trans. Benjamin Jowett (New York: Oxford University Press, 1892), 214-46.

until the age of 50, consisting of periods of work experience alternated with periods of formal study. Candidates would be eliminated during the course of the training for various ineptitudes. After the age of 50, the trainee was expected to give some time to government while concentrating on the study of philosophy.

Another writer and student of leadership was Machiavelli, who from 1498 until 1511 was Secretary to the Second Chancery of the Republic of Florence.<sup>1</sup> After being exiled with the return of the Medici to power, he attempted to regain favor with Lorenzo Medici by dedicating to him the manuscript of De Principatibus, or The Prince. In this book, Machiavelli set out to provide the would-be ruler with a set of principles for acquiring and maintaining rule of a state. Ruthless as his methods appear compared to modern-day standards, his text remains one of the first and most complete treatises on leadership style.

#### The Trait Concept of Leadership

For thousands of years, the prevailing concept of leadership was that it consisted of a collection of traits and techniques that the leader either possessed or acquired. This concept influenced the beginnings of the modern study of leadership.

Among the first of the modern studies of leadership

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<sup>1</sup>Niccolo Machiavelli, The Prince, trans. Luigi Ricci (New York: New American Library, 1952), pp. 9-11.

was that conducted by Alfred Binet.<sup>1</sup> He attempted to separate school children into groups of leaders and followers through the use of measurement techniques. His work led to the development of the first methods for testing intelligence.

Considerable study was done with school children to isolate traits of leaders as they emerged in school settings. Remmlein studied high school seniors, and found that leaders among them tended to be younger and superior in scholarship, intelligence and dominance.<sup>2</sup> Parten found that leaders among nursery school children were more intelligent and socially developed than non-leaders.<sup>3</sup> Middleton studied college student leaders, finding them to be superior in character, intelligence, persistence, accuracy, sociability and judgment, compared to non-leaders.<sup>4</sup>

Terman repeated Binet's experiments with a larger

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<sup>1</sup>Alfred Binet, A Method of Measuring the Development of the Intelligence of Young Children, trans. Clara Town (third edition; Chicago: Chicago Medical Book Company, 1915).

<sup>2</sup>Madaline K. Remmlein, "Analysis of Leaders Among High School Seniors," Journal of Experimental Education, VI (June, 1938), 413-422.

<sup>3</sup>Mildred B. Parten, "Leadership Among Pre-School Children," Journal of Abnormal and Social Psychology, XXVII (January, 1933), 430-440.

<sup>4</sup>C. Middleton, "Personal Qualities Predominant in Campus Leaders," Journal of Social Psychology, XIII (February, 1941), 199-201.

sample and more sophisticated research techniques.<sup>1</sup> Beginning with 100 pupils in the Bloomington, Indiana, public schools, he attempted to separate them into categories of leaders and automatons on the basis of susceptibility to suggestion. He found that leaders tended to be identifiable early and to remain differentiated from automatons.

The search for traits of successful leaders led to the development of sophisticated methods and measurement devices. Lipham reported three such studies.<sup>2</sup>

Thurstone used a card-sorting test and a perception test on a group of federally-employed executives.<sup>3</sup> He discovered that successful executives were more accurate in perception and scored higher in ability to differentiate among categories when asked to sort cards.

Henry used a test, called the Thematic Apperception Test, to accompany interviews with successful business executives.<sup>4</sup> He concluded that successful executives were more

<sup>1</sup>Lewis Terman, "A Preliminary Study of the Psychology and Pedagogy of Leadership," Small Groups, eds. A. Paul Hare, Edgar Borgatta, and Robert Bales (New York: Knopf, 1955).

<sup>2</sup>James Lipham, "Leadership and Administration," Behavioral Science and Educational Administration. National Society for the Study of Education, Sixty-third Yearbook, Part II (Chicago: The University of Chicago Press, 1964), pp. 119-141.

<sup>3</sup>L. L. Thurstone, A Factorial Study of Perception (Chicago: University of Chicago Press, 1944), pp. 140-41.

<sup>4</sup>William E. Henry, "The Business Executive: The Psychodynamics of a Social Role," American Journal of Sociology, LIV (January, 1949), 286-91.

alert, active, able to organize unstructured activities, and higher in achievement drive than unsuccessful executives.

Chapple and Donald constructed a device which they termed an Interaction Chronograph to measure both verbal and nonverbal behaviors during a structured interview.<sup>1</sup> They found that high scores were obtained by supervisors in the traits of initiative, dominance and interaction speed.

Although intensive efforts to discover the traits of effective leaders have continued well into the present century, investigators increasingly found that these studies were yielding unsatisfactory results in terms of a workable definition of leadership. In a review of 124 leadership studies, Stogdill found that the trait approach to leadership yielded negligible results.<sup>2</sup>

Similarly, Jenkins concluded that, "No single trait or group of characteristics has been isolated which sets off the leader from the members of his group."<sup>3</sup>

Sanford summarized the situation regarding the trait approach to leadership most aptly when he said:

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<sup>1</sup>Eliot D. Chapple and Gordon Donald, Jr., "A Method for Evaluating Supervisory Personnel," Harvard Business Review, XXIV (Winter, 1946), 201-3.

<sup>2</sup>Ralph M. Stogdill, "Personal Factors Associated with Leadership: A Survey of the Literature," Journal of Psychology, XXV (1948), 35-71.

<sup>3</sup>William Jenkins, "A Review of Leadership Studies with Particular Reference to Military Problems," Psychological Bulletin, XLIV (January, 1947), 54-79.

From all these studies of the leader we can conclude, with reasonable certainty, that:

- (1) There are either no general leadership traits, or, if they do exist, they are not to be described in any of our familiar psychological or common-sense terms.
- (2) In a specific situation, leaders do have traits which set them apart from followers, but what traits set what leaders apart from what followers will vary from situation to situation.<sup>1</sup>

### The Situational Concept of Leadership

Belief in the concept of leadership as a collection of traits did not give way overnight to the situational concept of leadership. As the trait approach foundered, the investigation of situational factors in leadership was gaining momentum.

One of the first modern theorists to speculate on the interrelationship of the leader and the group was Freud.<sup>2</sup> In his theories, a leader was a person around whom the group formative process crystallized. Freud theorized that group members transfer the attitudes and behavior patterns learned in the primary family to the groups they join in later life. Groups therefore take on many of the characteristics of a family, transferring the father image to the leader. The success of a leader might therefore depend on his ability to sense the needs of the group and form an appropriate

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<sup>1</sup>Fillmore H. Sanford, "Research on Military Leadership," Psychology in the World Emergency, ed. John C. Flanagan (Pittsburgh: University of Pittsburgh Press, 1952), p. 51.

<sup>2</sup>Saul Scheidlinger, "Freudian Concepts of Group Relations," Group Dynamics: Research and Theory, ed. Dorwin Cartwright and Alvin Zander (Evanston, Illinois: Row, Peterson, 1953).



behavioral pattern in response to those needs. A similar view was held by Tannenbaum and Schmidt.<sup>1</sup>

Until about 1925, the study of leadership and group dynamics was largely speculative. Beginning in the 1920's, theorists attempted to broaden the studies of leadership using Freud's theories as background. Studies such as those of Cooley and Simmel showed the importance of belonging to a group, and that modern social life consists of multiple group memberships.<sup>2</sup> Cattell related leadership to the behavior of the group as a group, which he termed "syntality."<sup>3</sup> A leader, according to Cattell, is any person who has a demonstrable effect on group syntality, which means that leadership could be shown even by those not officially designated as leaders.

A contributor to the concept of leader-group inter-relationship during this period was Barnard.<sup>4</sup> Although not formally trained as a theorist, Barnard was able to

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<sup>1</sup>Robert Tannenbaum and Warren Schmidt, "How to Choose a Leadership Pattern," Harvard Business Review, XXXVI (March-April, 1958), 95-101.

<sup>2</sup>C. H. Cooley, Social Organization (New York: Scribner, 1909); Georg Simmel, The Sociology of Georg Simmel, ed. and trans. Kurt H. Wolff (Glencoe, Illinois: Free Press, 1950).

<sup>3</sup>Raymond Cattell, "New Concepts for Measuring Leadership in Terms of Group Syntality," Human Relations, IV (May, 1951), 161-84.

<sup>4</sup>Chester I. Barnard, The Functions of the Executive (Cambridge: Harvard University Press, 1938), p. 289.

synthesize his experience and observations of leadership into a general theory of administration so powerful that, according to Griffiths, "most, if not all, of the present theories [of administration] in the marketplace have their genesis in Barnard."<sup>1</sup>

Barnard was perhaps the first to write about leadership as a combination of technical proficiency and moral complexity. He emphasized the need for selecting and developing leaders with a balance of these two factors.

The emergence of the importance of the group, and therefore the importance of situational leadership, was given a boost in the late 30's and 40's through the Western Electric studies by Mayo, and by Roethlisberger and Dickinson.<sup>2</sup> Several experimental changes in the conditions of work in the Hawthorne Plant of Western Electric Company had presented no clear indication of the factors most responsible for changes in production rates. The experimenters were at a loss to explain variations in productivity that seemed to have no relationship to the experiments. They concluded finally that the change induced by the experimenters themselves in the social system of the workers was the cause

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<sup>1</sup>Daniel E. Griffiths, Administrative Theory (New York: Appleton-Century-Crofts, 1959), p. 63.

<sup>2</sup>Elton Mayo, The Human Problems of an Industrial Civilization (Boston: Harvard Business School, 1945); Fritz J. Roethlisberger and William J. Dickinson, Management and the Worker (Cambridge: Harvard University Press, 1939).

of the productivity changes. This realization had a profound effect on the theories of management that resulted, and upon the leadership theories that accompanied them.

Studies of leadership as a sociological phenomenon were becoming more frequent by the late 1940's. In an elaborate study of nearly 500 groups, Hemphill demonstrated in 1949 that leadership is significantly related to situational variance, for example group size.<sup>1</sup> Hemphill analyzed the relationship between the size of the group and the leader's behavior, and concluded that large groups make more and different demands on the leader than do small groups. In general, the leader in a large group tends to be more impersonal and to enforce rules firmly.

Lipham reported the work by Guetzkow with decision-making conferences, and by Katz, Maccoby and Morse in studying high- and low-productivity groups, showing that working with groups is a complex task, and that differences among groups have implications for the leader.<sup>2</sup> Davey has shown that different situations require different leadership

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<sup>1</sup>John K. Hemphill, Situational Factors in Leadership, research monograph no. 32 (Columbus: Bureau of Educational Research, Ohio State University, 1949).

<sup>2</sup>Lipham, op. cit., p. 131, citing Harold Guetzkow, Groups, Leadership, and Men (Pittsburgh: Carnegie Press, 1951); Daniel Katz, Nathan Maccoby, and Nancy Morse, Productivity, Supervision and Morale in an Office Situation (Ann Arbor: University of Michigan Press, 1950).

styles.<sup>1</sup>

Sociological studies of leadership often highlight the conflicting demands placed upon leaders. Moser investigated the effect of conflicting expectations on school principals.<sup>2</sup> Teachers and superintendents, it was discovered, placed conflicting demands on the principal's role, and principals were found to act differently in the presence of the superintendent than in the presence of teachers. In terms of the nomothetic and ideographic dimensions of behavior postulated by Getzels, leaders tend to show nomothetic attitudes (those related to the goals of the institution) in the presence of their superiors, whereas in the presence of subordinates, ideographic behaviors--those associated with personal needs--are favored.<sup>3</sup>

Snow studied the differing demands placed upon school superintendents in communities with either high or low

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<sup>1</sup>A. G. Davey, "Leadership in Relation to Group Achievement," Educational Research, XI (June, 1969), 185-192.

<sup>2</sup>Robert Moser, "The Leadership Patterns of School Superintendents and School Principals," Administrator's Notebook, VI (September, 1957), 1-4.

<sup>3</sup>Jacob W. Getzels, "Administration as a Social Process," Administrative Theory in Education, ed. Andrew W. Halpin (Chicago: Midwest Administration Center, University of Chicago, 1958), pp. 150-65.

community resources and high or low conflict propensity.<sup>1</sup> He found that the levels of community resources available and the degree of potential conflict present affect the attitudes of school boards and citizens toward the superintendent, and the type of leadership demanded of him.

Another example of conflicting pressures on the leader was shown by Bidwell, who found that the same behavior on the part of the leader resulted in both feelings of security and feelings of frustration among teachers, depending on whether the behavior was rated by satisfied or dissatisfied teachers.<sup>2</sup> It was apparent that different groups required different sets of actions on the part of the leader in order to fulfill their expectations.

Not only does the group affect the leader; studies have traced the profound effect of leader attitudes upon the group. In an experimental situation, Bolanger and Fischer found that the attitude of the group leader caused a shift in the attitudes of the group, affecting the content of the group's decisions.<sup>3</sup> Groups led by a risk-taking leader

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<sup>1</sup>R. J. Snow, "Community Resources and Conflict Propensity as Sources for Constraints on the Local School Administrator" (Eugene: Center for the Advanced Study of Educational Administration, University of Oregon, 1967; Bethesda: ERIC Document Reproduction Service, ED 012 507, 1967).

<sup>2</sup>Charles E. Bidwell, "The Administrative Role and Satisfaction in Teachers," Journal of Educational Sociology, XXIX (September, 1955), 41-7.

<sup>3</sup>Fabien Bolanger and Donald Fischer, "Leadership and the Group-Shift Phenomenon," Perceptual and Motor Skills, XXXIII (December, 1971), 1251-8.

tended to make more risky decisions, whereas groups led by a cautious leader made significantly more cautious decisions than the control group, which had no designated leader.

A comprehensive analysis of the responsibilities of leaders has been given by Likert.<sup>1</sup> In a discussion of the nature of highly effective groups, Likert points out the dual responsibilities of leaders. Leaders must bear full responsibility for the performance of the group in meeting the demands and expectations placed upon it, and at the same time "the leader feels primarily responsible for establishing and maintaining at all times a thoroughly supportive atmosphere in the group."<sup>2</sup>

The situational study of leadership yielded much more useable data to guide the formation of leadership theory than did the trait approach, but researchers still lacked a comprehensive view of situational variables. As Campbell has observed: "For the most part, exact ways by which situational variables affect administrative behavior have yet to be documented."<sup>3</sup> This recognition was in effect a call for more research in the field.

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<sup>1</sup>Rensis Likert, "The Nature of Highly Effective Groups," Organizations and Human Behavior: Focus on Schools, eds. Fred Carver and Thomas J. Sergiovanni (New York: McGraw-Hill, 1969), pp. 356-67.

<sup>2</sup>Ibid., p. 364.

<sup>3</sup>Roald Campbell and Russell Gregg, eds., Administrative Behavior in Education (New York: Harper and Brothers, 1957), p. 263.

It may now be seen that the concept of leadership has evolved from one exclusively associated with traits of a leader in isolation from the group to one associated almost exclusively with the leader as a group member, supporting and in turn being supported by the group. Halpin noted that the course of historical movements was often a zig-zag, rather than a straight line.<sup>1</sup> He stated that the final position reached was usually one in the middle, between two opposing orthodoxies. In observing that leadership research is presently following the same developmental course, he stated:

Early research was marked by a search for traits of leadership that would discriminate between leaders and non-leaders. The situational emphasis which has characterized research during the past decades arose as a protest against the earlier trait approach, but in some respects this present emphasis may have been carried to excess. . . . Even now, within research circles, a gradual but growing counterreaction is taking shape--a drawing away from the extreme situational position, with increasing recognition that the truth probably lies in an area of middle ground.<sup>2</sup>

The middle ground to which Halpin referred is the behavioral study of leadership. The discussion of this most recent development in leadership study, and of the development of the Leader Behavior Description Questionnaire, forms the third part of this section.

### The Behavioral Study of Leadership

The most recent development in the study of leadership

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<sup>1</sup>Andrew W. Halpin, Theory and Research in Administration (New York: MacMillan, 1966), p. 84.

<sup>2</sup>Ibid.

has been the advent of the behavioral approach. As was suggested by Halpin above, this approach occupies a middle ground between the extremes of the trait and situational approaches. The behavioral approach denies neither extreme; rather, it represents a blending of viewpoints, recognizing that situations and personality traits interact to determine the actions, or behaviors, of the leader.

There were advantages to shifting from a view of leadership as either a sociological function or the result of a peculiar combination of personality traits, to the study of the observed behaviors of leaders. Halpin noted two major methodological advantages:

In the first place, we can deal directly with observable phenomena and need make no a priori assumptions about the identity or structure of whatever capacities may or may not undergird these phenomena. Secondly, this formulation keeps at the forefront of our thinking the importance of differentiating between the description of how leaders behave and the evaluation of the effectiveness of their behavior in respect to specified performance criteria.<sup>1</sup>

The behavioral approach was thus seen to concentrate on observed, rather than inferred phenomena, avoiding subjective determinations of effectiveness.

The study of leader behavior began as a part of the Ohio State Leadership Studies, under the direction of Dr.

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<sup>1</sup>Halpin, op. cit., p. 86.



Carroll Shartle.<sup>1</sup> From this series of studies, several methods of measurement were developed, not only those appropriate to leader behavior, but others, such as measures of organizational structure, personal interaction, work performance, responsibility, authority, delegation and effectiveness.

In order to study the behavior of leaders in a manner that allowed systematic collection of data, an adequate definition of leadership was necessary. However, as Shartle has pointed out, no such definition was in existence when the Ohio State Leadership Studies began in 1945.<sup>2</sup> Jenkins had drawn the same conclusion earlier, when he observed that no progress had been made in developing "criteria of leadership behavior nor in the setting-up of an adequate working definition of the concept to guide research in the isolating of leadership traits."<sup>3</sup> The definition accepted for these studies was that "leadership may be defined as the process (act) of influencing the activities of an organized group in

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<sup>1</sup>Ralph Stogdill and Carroll L. Shartle, Methods in the Study of Administrative Leadership, research monograph no. 80 (Columbus: Bureau of Business Research, Ohio State University, 1955).

<sup>2</sup>Ralph Stogdill and Alvin Coons, eds., Leader Behavior: Its Description and Measurement, research monograph no. 88 (Columbus: College of Administrative Science, Ohio State University, 1957), p. 1.

<sup>3</sup>Jenkins, op. cit., p. 75.

its efforts toward goal setting and goal achievement."<sup>1</sup>

An instrument designed to measure leader behavior, called the Leader Behavior Description Questionnaire (LBDQ) was developed by Hemphill, and factorial analysis was used by Halpin and Winer to isolate two fundamental dimensions of leader behavior measured by the original 150 item instrument.<sup>2</sup> The two dimensions isolated were Initiating Structure and Consideration, which were defined by Halpin as follows:

Initiating Structure refers to the leader's behavior in delineating the relationship between himself and members of the work-group, and in endeavoring to establish well-defined patterns of organization, channels of communication, and methods of procedure. Consideration refers to behavior indicative of friendship, mutual trust, respect, and warmth in the relationship between the leader and the members of his staff.<sup>3</sup>

There is much evidence that the dimensions of Initiating Structure and Consideration outline two distinct functions of the act of leadership. In a review of selected leadership studies, Bowers and Seashore concluded that leadership concepts tended to sort themselves into two

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<sup>1</sup>Ralph Stogdill, "Leadership, Membership and Organization," Psychological Bulletin, XLVII (January, 1950), 4.

<sup>2</sup>John Hemphill and Alvin Coons, "Development of the Leader Behavior Description Questionnaire," Stogdill and Coons, op. cit., pp. 6-36; Andrew Halpin and James Winer, "A Factorial Study of the Leader Behavior Descriptions," Stogdill and Coons, op. cit., pp. 39-51.

<sup>3</sup>Andrew Halpin, The Leadership Behavior of School Superintendents (second edition; Chicago: Midwest Administrative Center, University of Chicago, 1959), p. 4.

general categories, one concerned with people and one concerned with getting the job done.<sup>1</sup> Blake and Mouton postulated the same two dimensions, and identified eighty-one separate leadership styles based upon combinations of concern for task (Instrumental dimension) and concern for people (Socio-Emotional dimension).<sup>2</sup> Other authorities have cited the same general dichotomy. Getzels' Nomothetic and Ideographic dimensions are virtually identical to Initiating Structure and Consideration, as are the concerns for effectiveness and efficiency raised by Barnard, and the dual goals of group achievement and group maintenance discussed by Cartwright and Zander.<sup>3</sup>

Four leadership styles, based upon combinations of high or low Initiating Structure and high or low Consideration, were displayed in Halpin's quadrant scheme, shown in Figure 1.<sup>4</sup> The ordinates in the quadrant were defined by the averages of the two dimensions, and the quadrants were designated by Roman numerals. The behaviors of leaders

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<sup>1</sup>David Bowers and Stanley Seashore, "Predicting Organizational Effectiveness With a Four-Factor Theory of Leadership," Administrative Science Quarterly, II (September, 1966), 238-63.

<sup>2</sup>R. R. Blake and J. S. Mouton, The Managerial Grid (Houston, Texas: Gulf, 1964).

<sup>3</sup>Jacob W. Getzels, loc. cit.; Barnard, op. cit., pp. 60-61; and Dorwin Cartwright and Alvin Zander, op. cit., p. 496.

<sup>4</sup>Halpin, Theory and Research in Administration, op. cit., pp. 98-9.

characterized by scores in each cell of the quadrant were defined, also.

		CONSIDERATION		MEAN OF INITIATING STRUCTURE SCORES
INITIATING STRUCTURE	C- S+ (IV)	C+ S+ (I)		
	C- S- (III)	C+ S- (II)		
	MEAN OF CONSIDERATION SCORES			

Figure 1. A Quadrant Scheme for Describing Leaders' Behavior on the Initiating Structure and Consideration Dimensions.<sup>a</sup>

<sup>a</sup>From Halpin, Theory and Research in Administration, op. cit., p. 99.

Halpin described the behaviors in each quadrant thusly:

The leaders described in Quadrant I are evaluated as highly effective, whereas those in Quadrant III, whose behavior is ordinarily accompanied by group chaos, are characterized as most ineffective. The leaders in Quadrant IV are the martinets and the "cold fish" so intent upon getting a job done that they forget they are dealing with human beings, not with cogs in a machine. The individuals described in Quadrant II are also ineffective leaders. They may ooze with the milk of human kindness, but this contributes little to effective performance unless their Consideration behavior is accompanied by a necessary minimum of Initiating Structure behavior.<sup>1</sup>

Several studies have supported Halpin's contention

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<sup>1</sup>Halpin, Theory and Research in Administration, op. cit., pp. 98-99.

that the most effective leaders are high in both Initiating Structure and Consideration. In a study related to Blake and Mouton's Instrumental and Socio-emotional dimensions, Simmons found that high scores by leaders on both dimensions were crucial for effective committee operations.<sup>1</sup> Utz found a positive relationship between perceived principal effectiveness and concern for people and production.<sup>2</sup> Studies by Halpin with military groups, and by Hemphill with college administrators bore the same results.<sup>3</sup> Studies relating leader behavior to personal and situational variables will be reported in a later portion of this review.

A theory of leadership based upon the leadership styles illustrated in Figure 1 was proposed by Blanchard and Hersey.<sup>4</sup> Called the Life-Cycle Theory, it related the behavior of the leader to the maturity of the group being led. According to the Life-Cycle Theory, the leader of a low-maturity group is more effective if he displays high Structure

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<sup>1</sup>Jeannette Simmons, "A Study of Leadership Styles in Task-Oriented Committees," Journal of Applied Behavioral Science, VIII (March-April, 1972), 241-7.

<sup>2</sup>Robert Utz, "Principal Leadership Styles and Effectiveness as Perceived by Teachers" (paper presented at the American Educational Research Association annual meeting, April, 1972, Chicago, Illinois; Bethesda: ERIC Document Reproduction Service, ED 064 240, 1972).

<sup>3</sup>Lipham, op. cit., pp. 134-5.

<sup>4</sup>Kenneth Blanchard and Paul Hersey, "A Leadership Theory for Educational Administrators," Education, LXXX (April-May, 1970), 303-10.

and low Consideration (Quadrant IV in Figure 1). As the maturity of the group being led increases, the behavior of the manager adhering to this theory would change to one of high Structure and high Consideration--Quadrant I of Figure 1. The highest level of subordinate maturity would call for leader behaviors of low Structure and low Consideration, as in Quadrant III.

The Life-Cycle Theory conflicts with the image of the successful leader as always high in both dimensions. Behaviors in Quadrant III have been shown by Halpin to be characteristic of ineffective leaders (see page 29), but the Life-Cycle Theory maintains that these behaviors--low Consideration and low Structure--are most appropriate for high maturity subordinates. Evidence against the Life-Cycle Theory was found by House<sup>1</sup> and others, as well as by Halpin, Simmons, and Utz.

In the course of investigating the dimensions of Initiating Structure and Consideration, as well as during the validation of the instrument itself, several alternate forms of the LBDQ have been developed. Fleishman developed a Supervisory Behavior Description questionnaire and a Leadership Opinion Questionnaire, both based upon the LBDQ and

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<sup>1</sup>Robert House and others, "Leadership Style, Hierarchical Influence, and the Satisfaction of Subordinate Role Expectations: A Test of Likert's Influence Proposition," Journal of Applied Psychology, LV (October, 1971), 422-32.

designed to measure the same two dimensions.<sup>1</sup> Sergiovanni and others developed an alternate form, as did Yukl.<sup>2</sup> The length of the LBDQ itself has changed considerably since its first development. Originally 150 items long, it had shrunk by 1957 to just 40 items, thirty of which were scored, 15 for Initiating Structure and 15 for Consideration.<sup>3</sup> In 1959, Stogdill published a new form of the LBDQ, called the LBDQ-Form XII.<sup>4</sup> The LBDQ-Form XII measures twelve dimensions of leader behavior. This form has been used in much of the recent research since it was presumed that measuring twelve dimensions of behavior was superior to measuring only Structure and Consideration. A 1969 study by Brown, however, concluded after factorial analysis of the twelve dimensions that six of them loaded on the factor of Systems Orientation and six on the factor of Person-Orientation.<sup>5</sup> The basic two

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<sup>1</sup>Edwin Fleishman, "A Leader Behavior Description for Industry," and "The Leadership Opinion Questionnaire," Stogdill and Coons, op. cit., pp. 103-119 and 120-133.

<sup>2</sup>Thomas Sergiovanni, Richard Metzcus, and Larry Burden, "Toward a Particularistic Approach to Leadership Style: Some Findings," American Educational Research Journal, VI (January, 1969), 62-79; Gary Yukl, "A Situation Description Questionnaire for Leaders," Educational and Psychological Measurement, XXIX (Summer, 1969), 515-18.

<sup>3</sup>Halpin, Theory and Research in Administration, op. cit., pp. 88-9.

<sup>4</sup>Ralph M. Stogdill, "Manual for the Leader Behavior Description Questionnaire - Form XII" (Columbus: Bureau of Business Research, Ohio State University, 1963). (Mimeographed).

<sup>5</sup>Alan Brown, "Reactions to Leadership," Educational Administration Quarterly, III (Winter, 1967), 62-73.

dimensions long postulated for leader behavior seemed to have been upheld by Brown's study.

Until the late 1960's, the LBDQ was the chief instrument used to measure leader behavior. In the latter part of that decade, Fiedler published his Contingency Model for Leadership, along with an instrument designed to measure leader behavior in a different way.<sup>1</sup> The instrument, called the Least Preferred Co-Worker scale, or LPC, measures the attitude of an individual toward another person he has designated as his least preferred co-worker. Raters who fail to find any redeeming characteristics in their least preferred co-worker are designated as low LPC individuals; those who are able to see worthwhile traits even in non-desirable co-workers are designated as high LPC persons. It was accepted that low LPC leaders are more task-oriented, and high LPC leaders are human-relations oriented. Fiedler's model postulates that low LPC leaders are more effective where conditions for leadership are either very favorable or very unfavorable, but that high LPC leaders are more effective in situations of intermediate favorability.<sup>2</sup>

Support for Fiedler's concept and the LPC scale is accumulating. Studies by Hill and by Gruenfeld and others

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<sup>1</sup>Fred Fiedler, A Theory of Leadership Effectiveness (New York: McGraw-Hill, 1969).

<sup>2</sup>Ibid.



have supported hypotheses based upon Fiedler's model.<sup>1</sup> A study by Mitchell concluded that: a) high LPC people are more cognitively complex; b) high LPC people differentiate more between task and interpersonal characteristics in decisions; and c) high LPC people are more complex in their use of information.<sup>2</sup>

The Contingency Model for Leadership was tested and verified by Hunt.<sup>3</sup> In an experimental situation, he concluded that employing first level managers with high LPC scores and second level managers (executives) with low LPC scores would provide an optimum leadership combination that would improve team performance. The combination of high and low LPC characteristics in the management team that Hunt proposed would yield precisely the same mixture of Initiating Structure and Consideration that other research has shown to be essential for effective leadership. It would appear that Fiedler's model and the LPC scale support the two-dimensional

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<sup>1</sup>Walter Hill, "A Situational Approach to Leadership Effectiveness," Journal of Applied Psychology, LIII (December, 1969), 513-17; Leopold Gruenfeld, David Rance, and Peter Weissenberg, "The Behavior of Task-Oriented (Low LPC) and Socially Oriented (High LPC) Leaders Under Conditions of Social Support," Journal of Social Psychology, LXXIX (October, 1969), 99-107.

<sup>2</sup>Terrence Mitchell, "Leader Complexity and Leadership Style," Journal of Personality and Social Psychology, XVI (September, 1970), 166-74.

<sup>3</sup>J. G. Hunt, "Leadership Style Effects at Two Managerial Levels in a Simulated Organization," Administrative Science Quarterly, XVI (December, 1971), 476-85.

concept of leader behavior.

The behavioral study of leadership, although only a bit over a quarter-century old, has yielded a reliable body of data about the ways in which leaders should and do behave. It has opened up new avenues of investigation, such as that of Fiedler and his followers, and has given investigators a set of measurement devices with which to describe otherwise elusive phenomena. As Lipham has said, "Perhaps the greatest contribution of the behavioral approach, however, is that it has highlighted the need for developing a better understanding of leadership."<sup>1</sup> On the basis of the new vistas opened by recent research in the behavioral study of leaders, researchers may be closer than ever to that understanding.

#### STUDIES USING THE LBDQ

Since the development of the original form of the Leader Behavior Description Questionnaire during the late 1940's, a large number of studies have been completed using it to measure leader behavior in specific situations. By far the greatest number of these studies have been in three general categories: air crew studies, industrial studies and educational studies. This portion of the review of literature will present pertinent information from selected studies in each area.

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<sup>1</sup>Lipham, op. cit., p. 139.

### Air Crew Studies

The study of leader behavior, as carried out under the Ohio State Leadership Studies, began with investigations of how air crew leaders went about the performance of their tasks.

The first study of this nature was done by Halpin and Winer who studied fifty-two air force bomber crew leaders.<sup>1</sup> They modified the original 150 item form of the LBDQ to a shorter 130 item form by eliminating twenty items that seemed inappropriate to air crew situations. This modified form was keyed for eight dimensions of leader behavior: Membership, Communication, Organization, Production, Domination, Leadership Quality, Goal Direction, and Initiative.

The LBDQ was administered to 300 members of crews of the fifty-two leaders studied. The descriptions obtained were scored on the eight keys named above, and the results subjected to sophisticated statistical treatment. Important findings of this study were: a) two factors, Consideration and Initiating Structure, accounted for eighty-three percent of the total factor variance, indicating that these factors were major dimensions of leader behavior; b) the two dimensions were correlated to some degree, but they were sufficiently independent to be viewed as different kinds of behavior; c) Consideration tended to be correlated negatively with effectiveness, as rated by the leaders' superiors, whereas

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<sup>1</sup>Halpin and Winer, loc. cit.

Initiating Structure was positively related to effectiveness ratings; and d) Consideration was more highly related to crew satisfaction than Initiating Structure behavior.

A second study of air crew leaders was conducted by Halpin in 1951, co-sponsored by the Air Force's Human Resources Research Laboratories and the Ohio State University Research Foundation.<sup>1</sup> In this study, an eighty item form of the LBDQ was used to obtain descriptions of the leader behaviors of eighty-nine bomber commanders from 670 crew members. Scores on the Initiating Structure and Consideration scales were compared to two other ratings: a) evaluation of the commander's performance by his superiors; and b) evaluations of the commander by his subordinates, in terms of sociometric ratings. Three hypotheses subjected to study were: a) that squadron and wing superiors would rate favorably the performance of those commanders who showed high Initiating Structure behavior; b) that crews would prefer as commanders those leaders who were high on Consideration behavior; and c) that commanders who were rated highest by their superiors on overall effectiveness in combat would score above the mean on both leader behavior dimensions, and those who were rated lowest by their superiors in overall combat effectiveness would score below the mean on both dimensions.

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<sup>1</sup>Andrew W. Halpin, "The Leader Behavior and Effectiveness of Aircraft Commanders," in Stogdill and Coons, op. cit., pp. 52-64.

The evidence collected in the study was found to support all three hypotheses. Support for the first two hypotheses was to be expected, since similar relationships were found in the Halpin and Winer study cited above. In discussing the results supporting the third hypotheses, Halpin noted:

The evidence thus indicates that the effective aircraft commander is not the one who engages in one form of leader behavior at the expense of the other, but rather is the leader whose behavior is above average in respect to both the consideration and initiating structure dimensions.<sup>1</sup>

Rush studied air crews to determine the relationship between leader behavior and certain characteristics of the air crew as a group.<sup>2</sup> Three samples of groups and their leaders were studied. Sample A was a set of fifty-two air crews that had only recently been assembled. Sample B consisted of seventy air crews that had been functioning as crews for a considerable period of time, and Sample C consisted of ninety combat crews in Korea. Within each crew, each member described the crew as a group, using a modification of Hemphill's Group Dimensions Description Questionnaire. The behavior of the commander of each crew was described by all members of the crew, except the commander himself, using the LBDQ.

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<sup>1</sup>Andrew W. Halpin, "The Leader Behavior and Effectiveness of Aircraft Commanders," in Stogdill and Coons, op. cit., p. 64.

<sup>2</sup>Carl H. Rush, Jr., "Leader Behavior and Group Characteristics," in Stogdill and Coons, op. cit., pp. 69-73.

The modified Group Dimension Description Questionnaire measured five group dimensions: Control, Harmony, Intimacy, Procedural Clarity, and Stratification. Consideration on the part of the leader was found to be positively correlated with Intimacy and Harmony in the crew, and to be negatively correlated with Control and Stratification. Initiating Structure was found to show a consistently high correlation only with Procedural Clarity.

The results of the Rush study appear consistent with those from the studies by Halpin and Winer, and by Halpin. That is, when Consideration tends to be correlated in a positive direction with crew satisfaction, it is reasonable to expect consideration to be a major factor in the perception of group togetherness as shown by Intimacy and Harmony scores. Initiating Structure, on the other hand, if viewed as relating to overall combat effectiveness, should contribute to the group's perception of Procedural Clarity, since clear procedures for accomplishing group tasks are essential for meeting the challenge of combat. Rush has thus shown that the effects of the leader's Initiating Structure and Consideration behaviors on the group as a group are at least as important as the effects of those same behaviors on individuals.

Halpin conducted a third study with aircraft commanders, comparing their "real" and "ideal" leader behaviors with the "real" and "ideal" leader behaviors of school

administrators.<sup>1</sup> The leaders' "ideal" scores were obtained by having each one complete the LBDQ indicating for each item how he felt he should behave as a leader. The "real" scores for each leader were obtained by administering the LBDQ to a number of his subordinates, asking them to mark each item according to their perceptions of how the leader actually behaved. The samples consisted of 132 aircraft commanders and sixty-four school administrators, most of whom were superintendents.

The results of the study indicated that military leaders differed in both ideology and actual behavior from educational leaders. Aircraft commanders exhibited more Initiating Structure and less Consideration than educational administrators on both the "real" and "ideal" measures. The differences in all cases were significant at the .001 level of confidence. From these results it was apparent that, at least for the sampled leaders and their subordinates, the type of leadership viewed as desirable for school administration was different from the leadership style desirable for military units. The data also indicated that caution was justified in accepting the leader's description of his ideal behavior as a measure of his actual behavior. For both aircraft commanders and educational administrators, very low correlations were found between the leaders' "real" and

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<sup>1</sup>Andrew W. Halpin, "The Observed Leader Behavior and Ideal Leader Behavior of Aircraft Commanders and School Superintendents," in Stogdill and Coons, op. cit., pp. 65-8.

"ideal" scores on either dimension. It is apparent, Halpin said, "that a leader's beliefs about how he should behave as a leader are not highly associated with his behavior as described by his followers."<sup>1</sup>

The air crew studies reported here pointed out the importance of the Consideration and Initiating Structure dimensions of leader behavior. The level of Initiating Structure behavior exhibited by a leader has been shown to be positively related to his superior's rating of his overall effectiveness in combat, and to his subordinates' perceptions of procedural clarity in the crew as a group. Consideration behavior effected not only the satisfaction of the crew with the leader, but the intimacy and harmony present in the crew itself. Important also was the realization that superiors and subordinates expected different proportions of these two behaviors to be exhibited by the leader, and that successful leaders were able to maintain a balance of sufficiently high levels of both types of behavior.

It is important to note for the purposes of this study that military leaders and educational leaders operated from different value systems, with educational administrators tending to value Consideration above Initiating Structure. Finally, the difference between the "ideal" and "real" behavior of leaders revealed by Halpin has relevance to this study,

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<sup>1</sup>Andrew W. Halpin, "The Observed Leader Behavior and Ideal Leader Behavior of Aircraft Commanders and School Superintendents," in Stogdill and Coons, op. cit., p. 68.



since it stressed the importance of measuring a leader's behavior through the ratings of his subordinates, rather than by his own perception of his actions.

### Industrial Studies

Parallelling the investigations of leader behavior in military situations, researchers have examined the effect of the leader on subordinates in business and industrial settings. A sampling of those studies is presented for comparison with the preceeding air crew studies, and with the educational studies to follow.

Fleishman developed a specialized form of the LBDQ called the Supervisory Behavior Description questionnaire.<sup>1</sup> This 136-item questionnaire was devised to measure four dimensions of leader behavior: Consideration, Initiating Structure, Production Emphasis, and Social Sensitivity. Although Halpin and Winer's air crew studies had found the last two dimensions to be of low utility, an attempt was made to strengthen items in these keys in order to heighten their independence from the first two dimensions.

The questionnaire was administered to a pre-test sample of 100 foremen at the International Harvester Company's Central School in Chicago. The purpose of the pre-test was to determine the suitability of the new scales for industrial situations, and to determine what revisions needed

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<sup>1</sup>Edwin A. Fleishman, "A Leader Behavior Description for Industry," in Stogdill and Coons, op. cit., pp. 103-119.

to be made.

It was determined that the attempts to build the Production Emphasis and Social Sensitivity keys into independent clusters had been unsuccessful. The dimensions of Consideration and Initiating Structure emerged, as in the air crew studies, as major, relatively independent, aspects of behavior.

On the basis of the results of the pilot study, Fleishman revised the Supervisory Behavior Description questionnaire.<sup>1</sup> A forty-eight item form was developed which was keyed for Consideration and Initiating Structure. An attempt was made to select items for each key that related strongly to that key and insignificantly to the other, so that the independence of the two dimensions could be strengthened.

The revised questionnaire was administered to a sample of 122 foremen in one of the motor truck plants of International Harvester Company. Analysis of the data showed the keys for the two dimensions to be relatively independent, and the reliability and validity of the revised form were found to be satisfactorily high.

Once it had been sufficiently refined as described above, the Supervisory Behavior Description questionnaire and the LBDQ were used in several business and industrial settings to measure the effects of leader behavior on other

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<sup>1</sup>Edwin A. Fleishman, "A Leader Behavior Description for Industry," in Stogdill and Coons, loc. cit.

variables. Several such studies were reviewed by Korman.<sup>1</sup>

Fleishman and Harris studied the effect of leader behavior on employee attitudes.<sup>2</sup> They found that grievances and high turnover were significantly positively correlated with Initiating Structure, and significantly negatively correlated with Consideration.

A 1955 study by Fleishman, Harris and Burttt showed that the effects of a leader's behavior on subordinate variables was highly affected by the nature of the task.<sup>3</sup> In a study of foremen in production and non-production departments, it was found that high Consideration was predictive of low absenteeism in production departments, and low accident rates and low absenteeism in non-production departments. High Initiating Structure scores for foremen were related to high proficiency ratings by superiors, high absenteeism, and high grievance rates in production departments, and to high turnover rates in non-production departments.

Similar results were found by Lowin and others in a

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<sup>1</sup>Abraham K. Korman, "Consideration, Initiating Structure, and Organizational Criteria--A Review," Personnel Psychology, XIX (Winter, 1966), 349-61.

<sup>2</sup>Edwin A. Fleishman and E. F. Harris, "Patterns of Leadership Behavior Related to Employee Grievances and Turnover," Personnel Psychology, XV (Summer, 1962), 43-56.

<sup>3</sup>Edwin A. Fleishman, E. F. Harris, and H. E. Burttt, Leadership and Supervision in Industry (Columbus: Bureau of Educational Research, Ohio State University, 1955).

study of productivity in manufacturing plants.<sup>1</sup> Productivity was correlated positively with Initiating Structure scores in production operations, but negatively with Consideration scores. The reverse relationship was true in non-production operations. The researchers also found that Consideration and Initiating Structure were not independent. High Initiating Structure scores were found to affect perceived levels of Consideration exhibited by the leader, but high levels of perceived Consideration did not affect Initiating Structure scores. Apparently, for a leader who displayed high Consideration, his Initiating Structure behavior was viewed by subordinates as a separate aspect of behavior, whereas the high Structure leader was viewed automatically as displaying low Consideration.

Another study revealing the effect of the nature of the task on employee satisfaction with leader behavior was conducted by House and others.<sup>2</sup> Within a group of engineers and technicians in a research and development unit, both Consideration and Initiating Structure were found to be positively related to role satisfaction. The positive relationship between Consideration and role satisfaction was to be expected,

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<sup>1</sup>Aaron Lowin, William Hrapchak, and Michael Kavanaugh, "Consideration and Initiating Structure: An Experimental Investigation of Leadership Traits," Administrative Science Quarterly, XIV (June, 1969), 238-53.

<sup>2</sup>Robert House, Alan Filley, and Steven Kerr, "Relation of Leader Consideration and Initiating Structure to R. & D. Subordinates Satisfaction," Administrative Science Quarterly, XVI (March, 1971), 19-30.

but the positive correlation between Initiating Structure and satisfaction seemed to run counter to the results obtained by other researchers. The investigators theorized that the relative ambiguity of research and development tasks, compared to the routinized tasks of manufacturing units, demanded greater levels of structure to reduce role ambiguity, and thereby increased satisfaction. The investigators concluded:

When work is not intrinsically satisfying [as in production units], one would expect increased resentment and dissatisfaction as the imposition of deadlines and structure increases. Employees of high occupational levels are less likely to have highly programmed, routine, repetitive tasks than semi-skilled or skilled laborers; therefore it is not surprising that they would respond more favorably to Initiating Structure than do employees in lower level occupations.<sup>1</sup>

House proposed a theory of leader effectiveness that attempts to reconcile what previously seemed to be unrelated or conflicting findings relative to the effects of leader behavior on worker productivity and satisfaction.<sup>2</sup> Called the Path Goal Theory, it proposes that the behavior of the leader affects the worker's estimate of the usefulness of using a given behavior (path) for accomplishing a given goal. Leader behavior also affects the worker's view of usefulness

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<sup>1</sup>House, Filley and Kerr, "Relation of Leader Consideration and Initiating Structure to R. & D. Subordinates Satisfaction," op. cit., p. 27.

<sup>2</sup>Robert House, "A Path Goal Theory of Leader Effectiveness," Administrative Science Quarterly, XVI (September, 1971), 321-38.

of attaining that goal in achieving personal outcomes that he values. Little study has been made of the Path Goal Theory, but testing of hypotheses derived from it may hold promise for gaining understanding of the mechanisms by which Initiating Structure and Consideration affect subordinate's behaviors.

The industrial studies, like the air crew studies, underscored the importance of Initiating Structure and Consideration as variables in a leadership situation. The influence of other variables in the work situation, such as the nature of the task, on subordinates' satisfaction was more evident in industrial studies, perhaps due to the greater variety of situations and samples than was found in the air crews' environments.

Of importance to this study was the evidence that the nature of the task affected subordinates' satisfaction with, and response to, the Initiating Structure and Consideration behaviors of the leader.

With these two fields of investigation briefly highlighted, the review of leadership studies in educational environments may now be placed in perspective.

### Educational Studies

Studies of the leader behavior of school administrators began about the same time as the business and industrial studies. The need for reliable data in the field of educational administration has generated hundreds of studies

using the LBDQ to assess leader behavior in relationship to other variables.

In an early study, Halpin measured the "real" and "ideal" leader behaviors of fifty Ohio school superintendents in a manner similar to his comparison study of aircraft commanders and school administrators described above.<sup>1</sup> In addition to "real" and "ideal" scores for the two dimensions obtained from the superintendents themselves, Halpin obtained "ideal" and "real" LBDQ scores on each superintendent from both board members and staff members.

The investigation yielded information that echoed results of earlier studies. There were agreements within groups and disagreements among the three groups in the type of behavior valued as "ideal" behavior. Board members tended to value Initiating Structure more highly than either the superintendents or the staffs. Staffs preferred less Structure than superintendents. Superintendents valued Consideration more highly than either board members or staff members in that order. All three groups described an "ideal" superintendent as one who scored high on both dimensions.

As in Halpin's earlier study, the "real" ratings showed little agreement among groups. Staff members' perceptions of the "real" extent of superintendents' Consideration behavior was much lower than either the boards' perception or

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<sup>1</sup>Halpin, Theory and Research in Administration, op. cit., pp. 111-18.

the superintendents' own perceptions. Board members described their superintendents as Initiating Structure more than they were perceived as doing by either the staffs or the superintendents. These results were consistent with results from the air crew and industrial studies reported, and with the results from a study conducted by Hemphill.<sup>1</sup>

Hemphill investigated the relationship between the leader behaviors of college department heads and the administrative reputations of those departments. The reputations of twenty-two college departments for being well administered were secured from faculty members of a liberal arts college. Data were also collected relative to "real" and "ideal" leader behaviors of the heads of those departments, the group characteristics of those departments as measured by the Group Dimensions Questionnaire, and demographic characteristics of the department, such as size, average age of members, educational attainment of members, etc.

Analysis of data showed no relationships to exist between administrative reputations of the twenty-two departments and either the group dimensions or the demographic characteristics of those departments. There was a significant relationship between the leader behavior of the department head and the department's reputation, however. Hemphill concluded:

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<sup>1</sup>John K. Hemphill, "Leader Behavior Associated With the Administrative Reputations of College Departments," in Stogdill and Coons, op. cit., pp. 74-85.



Those departments with best "reputations" for good administration have chairmen who are described as above the average on both Consideration and Initiating Structure and as more nearly<sup>1</sup> meeting the behavior expected of an ideal chairman.

Few of the studies conducted on leader behavior have been experimental studies. Dawson, Messe and Phillips noted in 1972 that in twenty years of research on Consideration and Initiating Structure, fewer than five experimental studies had been conducted.<sup>2</sup> In an experimental situation, they manipulated the amounts of Consideration and Initiating Structure behaviors displayed to two matched college general psychology classes. In one class, the instructor behaved in a manner consistent with high Consideration; in the other, he predominantly displayed Initiating Structure behavior. The performance of students in each class was measured by the quality and quantity of the entries in required bibliographies, their score level on examinations, and the number of research credits earned. Students in the high Structure class did well on only the bibliography measure, whereas the students from the high Consideration class did well on all three measures.

A number of studies have been conducted to investigate

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<sup>1</sup>John K. Hemphill, "Leader Behavior Associated With the Administrative Reputations of College Departments," in Stogdill and Coons, op. cit., p. 85.

<sup>2</sup>Jack Dawson, Lawrence Messe, and James Phillips, "Effect of Instructor Leader Behavior on Student Performance," Journal of Applied Psychology, LVI (October, 1972), 369-76.

the importance of Consideration and Initiating Structure in the administration of schools.

Kline studied the leader behaviors of central office curricular decision-makers in ten Wisconsin school districts, reasoning that "if an educational administrator were to understand the affect of his leader behaviors, logically he could increase the potential and impact of his leadership . . ."<sup>1</sup> His investigation was aimed at discovering the affect of leader behavior on the teachers' perception of the extent of change embodied in new curricular plans offered and the extent to which curricular innovations were being implemented.

No relationship was found between the central office curricular decision-maker's leader behavior and the degree of change perceived by teachers in new curricular plans. The correlation between teachers' perceptions of their implementation of curricular plans and their perception of the Consideration behavior of the curricular decision maker was found to be positive beyond the .05 level of confidence. Kline concluded:

If maximum gain is to be obtained for the instructional program, the educational leader at the central office level, carrying curricular improvement responsibilities, might do well to

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<sup>1</sup>Charles E. Kline, "Leader Behavior, Curricular Implementation and Curricular Change" (paper presented at the annual meeting of the American Educational Research Association, February 17, 1966, Chicago, Illinois; Bethesda: ERIC Document Reproduction Service, ED 027 569, 1966), p. 2.

reflect upon the concept that there is a direct relationship between the consideration he shows his teachers and the amount the staff members used their curricular plans and guides<sup>1</sup> in planning their instructional programs.

Other researchers have found similar indications of the importance of Consideration. Campbell studied instructional supervisors and found that aspects of the supervisors' behavior that were most highly valued by teachers were in the Consideration dimension.<sup>2</sup> Luckie investigated the leader behaviors of thirty-two Directors of Instruction from five southern states.<sup>3</sup> Superintendents, Directors of Instruction and teachers agreed that the dimension of Consideration was more important than Initiating Structure for the accomplishment of the Director's task.

Bowman made an important study investigating the relationship between the leader behavior of superintendents and the feeling of autonomy enjoyed by principals.<sup>4</sup> He measured

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<sup>1</sup>Kline, op. cit., p. 12.

<sup>2</sup>Ona L. Campbell, "The Relationships Between Eight Situational Factors and High and Low Scores on the Leadership Behavior Dimensions of Instructional Supervisors" (unpublished Doctor's dissertation, North Texas State University, 1961; Ann Arbor: University Microfilms, 61-3330).

<sup>3</sup>William R. Luckie, "Leader Behaviors of Directors of Instruction" (unpublished Doctor's dissertation, University of Southern Mississippi, 1963; Ann Arbor: University Microfilms, 64-4012).

<sup>4</sup>Herman J. Bowman, "Perceived Leader Behavior Patterns and Their Relationships to Self-Perceived Variables--Responsibility, Authority and Delegation" (unpublished Doctor's dissertation, State University of New York, Buffalo, 1964; Ann Arbor: University Microfilms, 64-9800).

100 principals' perceptions of their own degrees of responsibility, authority, and delegation, and compared the results to the LBDQ scores attributed by them to their superintendents.

Principals who rated their superintendents higher in Consideration viewed themselves as exercising significantly higher degrees of responsibility, authority, and delegation than those who rated their superintendent low in Consideration.<sup>1</sup>

Principals who rated their superintendents' total LBDQ score higher perceived themselves as exercising significantly higher degrees of authority (but not responsibility or delegation) than those who rated their superintendents lower in total score. When total LBDQ scores were high, the dimension most accounting for the high score was Consideration.<sup>2</sup>

The implications for educational leaders from Bowman's study seem obvious. If greater feelings of autonomy are desirable for principals to develop innovative programs, superintendents will need to display high degrees of Consideration behavior in their dealing with principals.

The importance of perceived consideration in leader

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<sup>1</sup>Bowman, loc. cit.

<sup>2</sup>Ibid.

behavior has also been underscored by Fietler.<sup>1</sup> He administered the LBDQ - Form XII, and the Profile of a School instrument to 412 teachers in twenty-three schools, to discover the relationship between the leader behaviors of elementary principals and the organizational processes of their schools. He found the dimensions of Tolerance of Freedom, Consideration, Integration, and Tolerance of Uncertainty to be significantly higher for schools with participative organizational processes than for schools with more authoritarian processes.

Cave found that certain leader behaviors were related to the presence of conflict between schools and teacher's unions.<sup>2</sup> In his study, conducted in Michigan, the factors most related to the presence of conflict were Consideration, Initiating Structure, Integration, Demand Reconciliation, Tolerance of Freedom and Production Emphasis. Low scores in these dimensions appeared to contribute to conflict.

The agreement between the factors relating to participative organizational processes in Fietler's study and to conflict in Cave's study is interesting. It seems logical to

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<sup>1</sup>Fred C. Fietler, "A Study of Principal Leader Behavior and Contrasting Organizational Environments" (paper presented at the annual meeting of the American Educational Research Association, April 3-7, 1972, Chicago, Illinois; Bethesda: ERIC Document Reproduction Service, ED 065 900, 1972).

<sup>2</sup>David R. Cave, "A Critical Study of the Leader Behavior of School Administrators in Conflict with Teachers' Unions" (unpublished Doctor's dissertation, Michigan State University, 1967; Bethesda: ERIC Document Reproduction Service, ED 015 520, 1967).

conclude that, when present in high degrees, Tolerance of Freedom, Integration, and Consideration promote organizational harmony, but that low amounts of these same factors promote conflict. This conclusion is mildly supported by the literature; however, some studies fail to find any relationship between leader behavior and aspects of organizational health. An example is the study by Wiggins. In an investigation of the relationship between organizational climate and leader behavior, no meaningful relationships were found.<sup>1</sup>

Willerman measured the effect of school superintendents' leader behaviors as perceived by principals on the extent of those principals' consideration of Basic Organizational Hierarchical Needs (BOHN) in decision-making.<sup>2</sup> These basic needs were defined as Survival, Security, Acceptance, Esteem/Prestige, and Autonomy. In situations wherein survival and security are not threatened, Willerman theorized that principals would take higher-level organizational needs into account when making decisions. In less secure situations, decisions would be made which would sacrifice higher-level needs in favor of security or survival. Willerman's

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<sup>1</sup>Thomas W. Wiggins, "Leader Behavior Characteristics and Organizational Climate" (unpublished Doctor's dissertation, Claremont Graduate School, Claremont, California, 1968; Ann Arbor: University microfilms, 68-18246).

<sup>2</sup>Marvin Willerman, "Effects of Two Styles of Leadership on Participants Perception of Basic Organizational Hierarchical Needs in a Simulated Decision Making Setting" (Bethesda: ERIC Document Reproduction Center, ED 075 906, 1973).

study attempted to discover whether perceived Initiating Structure and Consideration of the Superintendent would affect the level of needs served by principals' decisions in simulated settings.

Data showed that only effective superintendents, characterized as being high on both Structure and Consideration, influenced principals' perceptions of BOHN. Low Structure-low Consideration superintendents, or superintendents whose leadership style had not yet been perceived by principals, had no effect on the level of BOHN served by those principals' decisions.<sup>1</sup>

A pattern of preferences for leadership style emerges from reflection upon the studies reported thus far. It would appear that different styles of leadership are preferred by subordinates from their first- and second-line administrators. Principals, Directors of Instruction, and central office curricular decision makers have been shown to be perceived as most effective when their style of leadership is characterized by high Consideration with only moderate amounts of Initiating Structure. Superintendents, on the other hand, and with some exceptions, appear to be most effective when perceived as high in both dimensions. Other studies bore similar results.

Stout found that teachers prefer a permissive, non-directive leadership style for the role of the principal and

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<sup>1</sup>Willerman, op. cit., p. 14.

a charismatic role for the superintendent.<sup>1</sup> Sergiovanni, Metzcus and Burden concluded from their investigation that high Structure and Consideration might characterize the ideal principal, but that a different mix of those factors might have resulted if teachers had been asked to describe leadership styles that were most comfortable or satisfying to them.<sup>2</sup>

In addition to the research reported above, investigating the relationship between Consideration and Initiating Structure and the accomplishment of the tasks of administration, these dimensions of behavior have been investigated in relationship to personal qualities of the leader.

Kelly investigated the cognitive complexity of superintendents in relationship to scores on the LBDQ - Form XIII.<sup>3</sup> Greater degrees of cognitive complexity were ascribed to superintendents who were able to perceive finer differences in the total personalities of others. Cognitive complexity

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<sup>1</sup>Ray L. Stout, "Organizational Influence on Teacher Leadership Perception" (unpublished Doctor's dissertation, Oklahoma University, 1968; Bethesda: ERIC Document Reproduction Service, ED 021 794, 1968).

<sup>2</sup>Sergiovanni, Metzcus, and Burden, loc. cit.

<sup>3</sup>Wilbur R. Kelly, Jr., "The Relationship Between Cognitive Complexity and Leadership Style in School Superintendents," (unpublished Doctor's dissertation, State University of New York, Albany, 1968; Ann Arbor: University Microfilms, 68-5270).

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was found to be positively related to scores in the dimensions of Consideration, Tolerance of Freedom, Demand Reconciliation, Persuasion, and Predictive Accuracy.

In a study designed to determine if relationships existed between leader behavior and the political orientation of superintendents, Null and Smead found a slight relationship between Foreign Affairs and Nature of Man beliefs and certain dimensions of leader behavior.<sup>1</sup>

Seeman investigated the relationship between leader behavior and the social mobility of superintendents.<sup>2</sup> Data were collected about the actual degree of mobility exhibited by superintendents, their attitude toward mobility, and their attitude toward change, in addition to LBDQ scores from both board members and the superintendents themselves. Results of the investigation showed some significant relationships.

Executives who placed a high value on mobility were said by board members to be significantly low in Consideration, and described themselves as being relatively high in Initiating Structure.

Readiness to accept change was significantly low among those who placed a high value on mobility and were mobile

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<sup>1</sup>Eldon J. Null and William H. Smead, "Relationships Between the Political Orientation of Superintendents and Their Leader Behavior as Perceived by Subordinates," Journal of Educational Research, LXV (November, 1971), 103-6.

<sup>2</sup>Melvin Seeman, "Social Mobility and Administrative Behavior," American Sociological Review, XXIII (December, 1968), 633-42.

themselves, as well as among their opposites, that is, non-mobile executives with low values on mobility.

Initiating Structure was significantly low among those who placed a high value on mobility but who had not been highly mobile, and among their opposites, that is, those who had been highly mobile and yet placed a low value on mobility.

Seeman concluded that there was little relationship between mobility alone and leader behavior but that mobility combined with attitude toward mobility bore a relationship to LBDQ scores.<sup>1</sup>

The Seeman study is of interest to this present study, in that it highlights the relationship between leader behavior and attitude toward mobility which has a direct bearing on the choice to become career-bound or place-bound.

A third area of leader behavior has been only lightly investigated. Only one study was found that related leader behavior, as measured by the LBDQ, to external factors in the school's environment.

Whipple measured the relationship between property tax burdens and the leader behavior of superintendents.<sup>2</sup> He found that superintendents' total LBDQ scores tended to be higher in school districts with high per-pupil assessed

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<sup>1</sup>Seeman, op. cit., p. 642.

<sup>2</sup>Carl M. Whipple, "Property Tax Burden and Leadership Behavior of School Superintendents," (unpublished Doctor's dissertation, Ohio State University, 1967; Ann Arbor: University Microfilms, 67-2561).

valuations and low millage rates, but that the differences were not significant.

This review of studies using the Leader Behavior Description Questionnaire and its alternative forms has revealed the importance of two main dimensions of leader behavior. Consideration and Initiating Structure have been found to be related to subordinate satisfaction, extent of role ambiguity, effectiveness ratings, prestige of the unit, degree of implementation of curricular plans, principals' feelings of autonomy and the content of their decisions, conflict with teacher's unions, cognitive complexity, political orientation, and mobility. The power of these two modes of behavior to affect the workings of the school and the everyday lives of its members has been well documented. Implications for school administrators are clear. School leaders' behavior affects far more than the simple content of their day-to-day decisions. Their Consideration and Initiating Structure behaviors generate a "ripple effect" throughout the entire organization, reaching even into the community. It behooves all those who find themselves in leadership positions to become more aware of the power they wield through the ways in which they interact with subordinates.

#### THE LITERATURE ON CAREER ORIGIN

When a vacancy occurs in a key organizational position, those charged with the selection of a replacement must make a decision whether to fill that position by promotion

from within the organization or by the selection of someone from outside. Whether an "insider" or an "outsider" is chosen will make a difference in the degree of social disturbance caused by the changeover, and in the style of leadership displayed by the replacement.<sup>1</sup>

Many different terms have been applied to the two categories of career origin. Hughes wrote of the "itinerant" and the "home guard" in the medical field.<sup>2</sup> Gouldner identified differences in attitude between "cosmopolitan" and "local" roles.<sup>3</sup> Carlson has made extensive studies of "career-bound" and "place-bound" superintendents.<sup>4</sup> It is apparent that despite differences in the labels, career origin may be viewed as a dichotomous variable.

The literature about career origin is not as extensive as that pertaining to leadership. As in leadership research, investigations began in sociological fields, and were only lately pursued in the field of education. This portion of

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<sup>1</sup>Oscar Grusky, "Administrative Succession in Formal Organizations," Social Forces, XXXIX (December, 1960), 105-15; Richard O. Carlson, Executive Succession and Organizational Change (Chicago: Midwest Administration Center, University of Chicago, 1962).

<sup>2</sup>Everett C. Hughes, "The Making of a Physician," Human Organization, XIV (Winter, 1955), 21-5.

<sup>3</sup>Alvin W. Gouldner, "Cosmopolitans and Locals: Toward an Analysis of Latent Social Roles, I and II," Administrative Science Quarterly, II (December, 1957), 281-306; and (March, 1958), 444-80.

<sup>4</sup>Carlson, School Superintendents: Careers and Performance, loc. cit.

the review of literature will present studies from both branches of investigation. The information will be presented in relationship to personality, job, and performance differences between persons of the two career origins.

### Personality Differences

Research has shown that persons who fit the "insider" category may differ in attitudes, motivations, and personal histories from those who belong to the "outsider" category. Apparently, there are distinct differences in these areas between those who actively seek advancement outside their containing organization and those who are willing to wait for promotion from within.<sup>1</sup>

One of the earliest to write about attitude differences between insiders and outsiders was Gouldner.<sup>2</sup> He studied latent social roles among the faculty of a small college. Two social roles became evident, which Gouldner labeled "locals" and "cosmopolitans."

"Locals" were defined as "those high on loyalty to the employing organization, low on commitment to specialized role skills, and likely to use an inner reference group orientation."<sup>3</sup> Cosmopolitans were "those low on loyalty to

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<sup>1</sup>Carlson, School Superintendents: Careers and Performance, op. cit., p. 41.

<sup>2</sup>Gouldner, "Cosmopolitans and Locals: . . ." loc. cit.

<sup>3</sup>Ibid., p. 290.

the employing organization, high on commitment to specialized role skills, and likely to use an outer reference group orientation."<sup>1</sup>

In supporting these definitions, Gouldner cited evidence from his study that showed the cosmopolitan group members to be more interested in research, more likely to have or be working on a Ph.D., to have published more, to know fewer fellow faculty members, to regard salaries as low and to obtain their intellectual stimulation from outside the faculty.

Gouldner concluded that the cosmopolitan-local dichotomy is useful in organizational analysis. He stated:

It may be that the study of the relations between cosmopolitans and locals in modern organizations can provide clues for the analysis of conflict within educational, governmental, hospital and other bureaucracies.<sup>2</sup>

The distinction between locals and cosmopolitans is not exactly the same as that between insiders and outsiders. However, many of the attitudes and reference group orientations of locals and cosmopolitans were found to be characteristic of insiders and outsiders as well.

Carlson studied the commitments of Oregon superintendents to advanced preparation for their position, a factor that related to the commitment to specialized role skills

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<sup>1</sup>Gouldner, "Cosmopolitans and Locals: . . ." loc. cit.

<sup>2</sup>Ibid., p. 467.

studied by Gouldner.<sup>1</sup> He found that Career-bound superintendents (outsiders) tended to hold higher advanced degrees than place-bound superintendents. In another study, he showed that career-bound superintendents tended to pursue these degrees at more prestigious graduate schools, and to complete their advanced formal education at a younger age than place-bound men.<sup>2</sup>

Carlson also studied the reference-group orientations of career-bound and place-bound superintendents.<sup>3</sup> Place-bound superintendents showed the same orientation as Gouldner's locals, that is, they tended to refer to their subordinates when asked, "whose estimate of your work is most important to you?", even though these same superintendents felt that the subordinates were the least accurate group in the judgment of their work. Career-bound superintendents, on the other hand, showed no distinct inner or outer reference groups.

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<sup>1</sup>Richard O. Carlson, "Career and Place Bound School Superintendents: Some Sociological Differences. A Project Report." (Eugene: Center for the Advanced Study of Educational Administration, Oregon University, 1969; Bethesda: ERIC Document Reproduction Service, ED 031 782, 1969), p. 11.

<sup>2</sup>Carlson, School Superintendents: Careers and Performance, op. cit., pp. 51-3.

<sup>3</sup>Richard O. Carlson, "Career and Place Bound School Superintendents: Some Psychological Differences. A Project Report." (Eugene: Center for the Advanced Study of Educational Administration, Oregon University, 1969; Bethesda: ERIC Document Reproduction Service, ED 031 781, 1969), pp. 13-15.

A comparison of Carlson's and Gouldner's work shows striking similarities between locals and place-bound superintendents, and between cosmopolitans and career-bound superintendents. These similarities lead to the conclusion that career-bound and place-bound superintendents (outsiders and insiders) differ according to the cosmopolitan-local dichotomy.

The study by Seeman described in the previous section indicated that executives with high values on mobility and who have been mobile (and would thus tend to be career-bound) display opposite leader behaviors than those who have a low value on mobility and have not been mobile.<sup>1</sup> Thus it can be seen that mobility attitudes may be another aspect of the basic difference in personality traits attributed to insiders and outsiders. Additional support for this observation was found by Watson.<sup>2</sup> In a study of Illinois superintendents, he found significant differences in the ways that insiders and outsiders perceived their mobility. Outsiders tended to have a more generalized construct of mobility, whereas insiders were more particularistic in their concepts. Perhaps insiders, being less in favor of high mobility, are able to be more objective about it.

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<sup>1</sup>Seeman, loc. cit.

<sup>2</sup>D. Gene Watson, "Superintendents' Mobility Constructs and Succession Patterns" (paper presented at the American Educational Research Association annual meeting, March 2-6, 1970, Minneapolis, Minnesota; Bethesda: ERIC Document Reproduction Service, ED 042 253, 1970).



In addition to differences in commitment to specialized role skills, reference-group orientation, and attitudes toward mobility, insiders and outsiders differ in their motivations to achieve promotion. Tausky and Dubin have proposed a model to explain differences in achievement motivation, called the Career Anchorages model.<sup>1</sup> According to this model, the achievement goal set by an individual may be either upward-anchored or downward-anchored. A rising executive who is motivated to seek the top, and who will not be satisfied until he reaches it, is said to be upward-anchored, or upward-mobile. He has set his sights on the top, and his motivation is "anchored" to the achievement of that spot. The downward-anchored manager, on the other hand, although he may have reached the same organizational level as his counterpart, is said to be motivated only by a desire to go as far as luck and his abilities will take him. He judges his success in terms of how far he has come, not how far he has yet to go. A third category, the ambivalent anchorage, includes those whose career ambitions are uncrystallized.

Tausky and Dubin developed a questionnaire called the Career Orientation Anchorage Scale, to measure the direction of anchorage of executives.<sup>2</sup> In a study of middle managers,

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<sup>1</sup>Curt Tausky and Robert Dubin, "Career Anchorage: Managerial Mobility Motivations," American Sociological Review, XXX (October, 1965), 725-35.

<sup>2</sup>Ibid.

they found only ten percent to be upward-mobile, whereas forty-seven percent were downward-anchored, and forty-three percent were ambivalent.

Other findings of interest in this study, especially in the light of data from the Gouldner and Carlson studies, were that upward mobile men spent significantly more on business suits, lived in more expensive homes, subscribed to more magazines, read the Wall Street Journal more regularly, had more formal education, entered the organization at a higher training and entry level, and were generally younger than downward-anchored managers. These findings would suggest a similarity between upward-anchored executives and career-bound and cosmopolitan executives, and between the downward-anchored life style and place-bound and local life styles.

Carlson reported on a secondary analysis of data from a study by Rose, in which career-bound and place-bound superintendents were compared in terms of career anchorage.<sup>1</sup> As in the Tausky and Dubin study, the great proportion of superintendents--75 percent--were downward-anchored, and only about six percent were upward-anchored. The data failed to find any differences between the two orientations in career anchorage, indicating that although career anchorage is a possible motivating factor in the "insider"-"outsider"

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<sup>1</sup>Carlson, School Superintendents: Careers and Performance, op. cit., pp. 62-4.

dichotomy, its validity has yet to be firmly established.

Another possible difference between insiders and outsiders that has been investigated is personal history. On the assumption that career-bound and place-bound superintendents might have had differences in their personal background that would help to account for attitudinal and personality differences, Carlson investigated a sample of eighty-three Oregon superintendents.<sup>1</sup> Data were collected about the number of times each subject's family had moved during childhood, the number of high school and college activities participated in, and the number of organizational memberships held. Career-bound superintendents were found to have moved significantly more times prior to age fifteen than place-bound men. Career-bound superintendents surpassed place-bound superintendents in number of high school and college activities, and in number of fraternal organization memberships. The differences were significant at the .05 level of confidence.

In the same study, Carlson collected data about certain psychological differences between the two career orientations.<sup>2</sup> Measurements were made of attitudes toward retirement, inferiority feelings felt in childhood, vocational interests, values, scores on the California Psychological

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<sup>1</sup>Carlson, "Career and Place Bound School Superintendents: Some Psychological Differences," op. cit., p. 65.

<sup>2</sup>Ibid.

Inventory, and attitudes toward self as measured by the Adjective Check List. Only the measures of childhood inferiority feelings and the results of the Adjective Check List showed any significant differences between groups. Place-bound superintendents reported significantly more feelings of inferiority in childhood than career-bound superintendents, although the sample had to be highly refined to show significance. On the Adjective Check List, career-bound superintendents reported themselves as being confident, spontaneous, optimistic, suggestible, idealistic, wise, poised, and progressive significantly more often than those in the place-bound sample. Place-bound superintendents described themselves as silent significantly more often than career-bound men.<sup>1</sup>

Insiders and outsiders were found in the literature to be different from each other in basic attitudes toward their profession, in their reference groups, their motivations to achieve, and in certain psychological and personal history characteristics. Certain aspects of the position to which they were elected were different because of their points of origin, as well. Those job differences will be discussed next.

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<sup>1</sup>Carlson, "Career and Place Bound School Superintendents: Some Psychological Differences," loc. cit.

### Job Differences

The conditions of employment differ for insiders and outsiders.<sup>1</sup> Investigators have highlighted several situational differences which affect the choice of an insider or an outsider.

The reasons for choosing a new leader vary from situation to situation. Hamblin found that leadership changes were significantly more likely to happen in groups experiencing crisis than in groups that were meeting success.<sup>2</sup> The same can probably be said for other organizations. School boards, for instance, are faced with judgments about the success of past performance and future needs.<sup>3</sup> If they perceive that a crisis exists or is imminent, the probability is heightened that a change in leadership will occur. The type of leader chosen will be different than if a vacancy comes about through death or voluntary resignation, and the performance expectations for the replacement will differ.<sup>4</sup>

Carlson pointed out these differences in expectations when he said:

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<sup>1</sup>Richard O. Carlson, Executive Succession and Organizational Change (Chicago: Midwest Administration Center, University of Chicago, 1962), pp. 17-22.

<sup>2</sup>Robert Hamblin, "Leadership and Crises," Sociometry, XXI (December, 1958), 322-5.

<sup>3</sup>Carlson, School Superintendents: Careers and Performance, op. cit., p. 75.

<sup>4</sup>Ibid., pp. 80-6.

The conditions of employment indicate that the school board will be satisfied if the insider "keeps things as they are," but they expect an outsider to make changes and are only satisfied when he does. School boards expect a creative performance from outsiders and are happy<sup>1</sup> with a stabilizing performance from insiders.

Another reason for changing the leader may be a change in the power group supporting the previous leader. The nature of these changes was found to influence the decision whether to hire an insider or an outsider.

Shafer investigated the effect of school board composition on the choice of superintendents.<sup>2</sup> In the state of California, districts undergoing unification were required to elect new boards representing the newly-formed districts. The superintendents of the pre-unification districts found themselves competing for the single new superintendency created. Their chances of being hired depended on the number of their pre-unification board members elected to the new unified board. In all cases where less than two members of any pre-unification board were elected to the unified board, the new board chose an outsider, rather than any one of the pre-unification superintendents. An insider was chosen only when two or more members of his original board were elected

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<sup>1</sup>Richard O. Carlson, "Succession and Performance Among School Superintendents," Administrative Science Quarterly, VI (September, 1961), 214.

<sup>2</sup>Eldon G. Schafer, "Unification: A Change of Power Structure Reflected on Board Composition and Superintendent Succession" (unpublished Doctor's dissertation, Claremont Graduate School, Claremont, California, 1967; Ann Arbor: University Microfilms, 67-9527).

to the new board.

Freeborn also showed the effect of changing power bases on the choice of superintendents.<sup>1</sup> He differentiated boards according to whether or not their composition had changed--through election--within three years before the election of a new superintendent. Those boards having undergone a change in composition were significantly more likely to choose an outsider as a replacement. Virtually identical results were obtained by Walden.<sup>2</sup>

The assumption behind both the Shafer and Freeborn studies was that public dissatisfaction with the schools would be reflected in changes in board composition. This degree of public satisfaction or dissatisfaction would determine whether the new superintendent would be career-bound or place-bound. The data from both studies supported that assumption. In commenting on this phenomenon, Carlson said, "Thus when school board members are dissatisfied with the performance of the school system, they hire a career-bound superintendent; they go outside the district for new leadership."<sup>3</sup>

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<sup>1</sup>Robert M. Freeborn, "School Board Change and the Succession Pattern of Superintendents" (unpublished Doctor's dissertation, Claremont Graduate School, Claremont, California 1966; Ann Arbor: University Microfilms, 67-9505, 1967).

<sup>2</sup>John C. Walden, "School Board Changes and Involuntary Superintendent Turnover" (unpublished Doctor's dissertation, Claremont Graduate School, Claremont, California, 1966; Ann Arbor: University Microfilms, 67-9533, 1967).

<sup>3</sup>Carlson, School Superintendents: Careers and Performance, op. cit., p. 80.

Going outside the district for new leadership can have an effect on the board's satisfaction with the superintendent. Outsiders may have an advantage over insiders in board satisfaction from the moment of hiring. In a recent study of hiring practices in New York State, the only significant variable affecting school boards' satisfaction with their new superintendents was the geographical area covered in the search for them.<sup>1</sup> The authors concluded that it "virtually constitutes an axiom--the wider the geographic selection base the better the chance of making a good selection."<sup>2</sup> Unfortunately, the investigators found, only 25% of the school boards had searched outside the state, and more than half had restricted their search to a specific region of their state.

In addition to differences in the reasons for hiring insiders and outsiders, the terms of their employment were shown to differ. Carlson's writings have reported research showing that career- and place-bound superintendents tended to differ in starting salaries. Salaries for career-bound men ranged from \$1,000 to \$2,500 higher than for place-bound men in one study, reported in two of Carlson's writings.<sup>3</sup>

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<sup>1</sup>Charles W. Fowler, "How You Hire Your Next Superintendent Can Fortell How He'll Work Out on the Job," American School Board Journal, CLX (March, 1973), 32-3.

<sup>2</sup>Ibid., p. 33.

<sup>3</sup>Carlson, Executive Succession and Organizational Change, op. cit., p. 20; School Superintendents: Careers and Performance, op. cit., p. 87.



These same sources reported differences in length of tenure, in favor of place-bound men, of differing levels of significance.<sup>1</sup> Career-bound men were also reported to have higher levels of prestige among fellow superintendents than those who were promoted from within.<sup>2</sup>

Clearly the literature supports the conclusion that differences in the nature of job expectations and rewards, and in the personalities of the persons hired to fill them, can be partially accounted for by considering the origin of the incumbent. The inside-outside origin of a role incumbent may also explain differences in performance on the job, as reported below.

#### Performance Difference

It is reasonable to speculate that differences in personality and job expectations would combine to produce differences between insiders and outsiders in their performance on the job. The literature supports that speculation.

Insiders and outsiders, it was found, could be expected to differ in the content of their decisions, and in their reliance on rules. Carlson reported that new career-bound superintendents tended to make new rules, whereas new place-bound superintendents concerned themselves with the

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<sup>1</sup>Ibid., p. 79 and pp. 140-41, respectively.

<sup>2</sup>Carlson, School Superintendents: Careers and Performance, op. cit., pp. 67-74.

dissemination and enforcement of existing rules.<sup>1</sup> Insiders, having a previous history in the school system, felt more constrained in their freedom to make rules, whereas the outsiders had no commitment to anything that had happened in the district before they were hired.<sup>2</sup>

One of the first to comment upon the difference between the perceived freedom of the outsider and the insider was sociologist Georg Simmel, who said of the outsider:

. . . he is freer, practically and theoretically; he surveys conditions with less prejudice; his criteria for them are more general and more objective ideals; he is not tied down in his action by habit, piety and precedent.<sup>3</sup>

This greater freedom was exhibited not only in the attitudes of outsiders, but in their actions as well. Deprin found that career-bound superintendents differed from place-bound, in that they accomplished more administrative acts in the first two years than did place-bound superintendents, they felt they had a clearer mandate for change from their boards (also reported by Carlson<sup>4</sup>), and they tended

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<sup>1</sup>Carlson, "Succession and Performance Among School Superintendents," op. cit., p. 216.

<sup>2</sup>Carlson, Executive Succession and Organizational Change, op. cit., p. 9.

<sup>3</sup>Simmel, The Sociology of Georg Simmel, op. cit., p. 405.

<sup>4</sup>Carlson, School Superintendents: Careers and Performance, op. cit., pp. 80-6.

to make more liberalizing rules than restrictive rules.<sup>1</sup>

Of importance in understanding the differing reliance on rules of "insiders" and "outsiders" is that they do not differ in their use of rules, but in the type of rules made and the functional significance those rules have to the new executive.

For the stranger, the outsider, rules serve to establish his identity, and to compensate for his lack of influence in the informal organization.<sup>2</sup> For the insider, the rules he makes or enforces have the function of serving notice on other staff members that he is now the man in charge.<sup>3</sup> Rules may also be relied upon by the insider to overcome doubts about the legitimacy of his promotion, especially among his rivals for the position.<sup>4</sup>

The differential purposes served by rules and the type of rules made may have an effect on the organizational climate of the school district. Hall has shown that school

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<sup>1</sup>Louis D. Deprin, "Superintendent Succession and Administrative Patterns" (unpublished Doctor's dissertation, University of Alabama, 1965; Ann Arbor: University Microfilms, 65-9921).

<sup>2</sup>Alvin W. Gouldner, Patterns of Industrial Bureaucracy (Glencoe, Illinois: Free Press, 1954), pp. 84-5.

<sup>3</sup>Carlson, School Superintendents: Careers and Performance, op. cit., p. 91.

<sup>4</sup>Grusky, op. cit., p. 108.

climates differ between "insiders" and "outsiders."<sup>1</sup> He compared the origin and length of tenure of superintendents with the organizational climates of their schools, and discovered several differences of interest, paraphrased below:

- (a) Outsiders (career-bound) of short tenure tended to have schools with more open climates.
- (b) Insiders (place-bound) of short tenure tended to have schools with more closed climates.
- (c) Outsiders of short tenure and insiders of long tenure were viewed as being more sympathetic, thoughtful and considerate.
- (d) Outsiders had programs and schools viewed by their staffs as more adaptable, dynamic, individualistic and imaginative than insiders.
- (e) Insiders' schools were viewed as more stable, thorough, basic, reliable, disciplined, conservative, and conventional, whereas outsiders' schools were viewed as more adaptable and forward-looking.
- (f) Long tenure superintendents were viewed as more cautious; staffs viewed short tenure superintendents as more imaginative.

Insiders and outsiders have been found to differ in the rate of adoption of educational innovations. In one

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<sup>1</sup>Clarence L. Hall, "Relationship of Origin and Tenure of Superintendents to the Organizational Climate and Adaptability of Schools," (unpublished Doctor's dissertation, Stanford University, 1966; Ann Arbor: University microfilms, 66-14621).

study, career-bound superintendents were found to have adopted "new" math at a significantly faster rate than place-bound superintendents. The investigator reported:

Modern math was first adopted by a career-bound superintendent and over one-fifth of the career-bound men adopted new math before it was adopted by a place-bound superintendent. By 1960 about one-half of the career-bound superintendents had adopted modern math while only 20 percent<sup>1</sup> of the place-bound men had done so by that time.

In the same study, career- and place-bound men were asked about their adoption of five other innovations--language labs, team teaching, programmed instruction, elementary grade foreign language, and accelerated secondary education programs. Again, place-bound men lagged behind their career-bound counterparts in the number of adoptions. "The median number of adoptions was four for career-bound men and two for place-bound men," the investigator reported.<sup>2</sup>

The data show a significant difference in the rate of adoption of a single innovation as well as a significant difference in the number of innovations over time. The cumulative effect of the unlike rates of acceptance of new practices can thus be seen.<sup>3</sup>

Who most accounted for this rate of adoption, the mobile superintendent or the mobile principal? The literature surveyed upheld the effect of the mobile superintendent--the career-bound outsider--on the adoption of innovations.

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<sup>1</sup>Carlson, "Career and Place Bound Superintendents: Some Sociological Differences," op. cit., p. 5.

<sup>2</sup>Ibid.

<sup>3</sup>Ibid., pp. 5-6.

Knedlik studied the effect of inside and outside principals and superintendents on the adoption of innovations.<sup>1</sup> He concluded that the fact of administrative succession did indeed have an effect on the adoption of new educational practices, and that superintendents' origin accounted for more differences in rate of adoption than did principals' origin. Career-bound superintendents adopted more innovations than place-bound men. The origin of the principal was not found to have an effect on the rate of adoption.

In a similar study, Manning found no differences between mobile and non-mobile principals in efforts to improve staff performance, as perceived by the staffs.<sup>2</sup>

The review of literature on executive origin showed that the insider-outsider dichotomy may be viewed as a useful conceptual tool for understanding observed differences in role incumbents, and in predicting performance differences among future successors. Those responsible for selecting school executives would do well to consider the effect that the selection of an insider or an outsider will have on their

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<sup>1</sup>Stanley M. Knedlik, "The Effect of Administrative Succession Pattern Upon Educational Innovation in Selected Secondary Schools" (unpublished Doctor's dissertation, New York University, 1968; Ann Arbor: University Microfilms, 68-6182).

<sup>2</sup>Richard F. Manning, "The School Principalship: A Study of Mobility and Its Relationship to Educational Leadership" (unpublished Doctor's dissertation, Case Western Reserve University, 1969; Ann Arbor: University Microfilms, 69-9356).

schools, in both the short and the long run. In Carlson's words, "The data suggest that the leaders of the profession are career-bound superintendents."<sup>1</sup>

#### SUMMARY

Leadership is an important social act, and has been the concern of philosophers, scientists, and leaders themselves for thousands of years. Early treatises on leadership concentrated on observable or measureable traits possessed by leaders, and the trait approach to leadership study carried well into the early part of this century.

When it became evident that leadership study could not be restricted merely to delineating the traits of "good" leaders, investigators began examining leadership as a social phenomenon. The effects of the leader upon the group, and of the group upon the leader, were studied in both real and experimental situations. Although the sociological study of leadership yielded much important information detailing the complicated interrelationships between leaders and groups, one branch of investigation began to take shape that concerned itself with how leaders behaved, rather than what leaders did.

The behavioral study of leadership began with the Ohio State Leadership Studies of 1945. Several instruments

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<sup>1</sup>Carlson, "Career and Place Bound Superintendents: Some Sociological Differences," op. cit., p. 17.

were developed and validated for the measurement of leader behavior, but the most important of these was the Leader Behavior Description Questionnaire (LBDQ), developed by Hemphill and refined by Halpin and Winer. The LBDQ measured two distinct, fundamental aspects of leader behavior, which were labeled Initiating Structure and Consideration.

In a number of investigations reported, Initiating Structure and Consideration were found to be significantly related to other variables within organizations and groups. These two dimensions of behavior were found to affect group processes, superiors' ratings of leader effectiveness, employee grievances and turnover, perceived adoption of curricular plans, staff satisfaction, prestige of college departments, principals' feelings of autonomy, and conflict with teachers' unions, among other effects. The extent of a leader's behavior in each dimension has thus been found to meaningfully explain some differences in the success of leaders and the groups they led.

Turning from the discussion of studies in leadership, literature on career origins was reviewed. Two points of origin were discerned for executives appointed to office. Those appointed from within the organization were considered "insiders"; those elected from outside the formal organization were called "outsiders." The insider-outsider dichotomy was found in many studies of executive succession, although different terms were applied to the categories. Insiders have been variously termed as home guard, locals, and place



bound; whereas outsiders have been tagged as itinerants, cosmopolitans, and career-bound.

Studies reviewed in this chapter showed that the insider-outsider classification was useful in explaining differences in the personalities, job expectations, and performance of successors, with outsiders generally being viewed as more successful. In schools, outsiders more often accounted for liberalizing rules, freer decisions, more open climates, and higher rates of adoption of educational innovations than insiders. One of the foremost authorities in the field was quoted as stating that career-bound men were the leaders of the profession.

A synthesis of the information from the two fields of investigation leads to the conclusion that leadership style is a significant organizational variable, and that one of the factors mitigating for or against this leadership style is the career origin of the leader. Therefore, researchers would expect to discover from an investigation of the leader behaviors of career-bound and place-bound superintendents that those behaviors are related to their point of origin, i.e., whether promoted from within or elected from outside the schools they lead.

## Chapter 3

### METHODOLOGY OF THE STUDY

This chapter will detail the methods used to collect and process the data that are reported in Chapter 4.

#### DATA COLLECTION

Collection of data for the study required the administration of two questionnaires. The first, the Career Patterns Questionnaire, was designed to determine the career origins of superintendents. The second questionnaire was the Leader Behavior Description Questionnaire (LBDQ).

#### Career Patterns Questionnaire

A four-item Career Patterns Questionnaire was created for the purpose of collecting data from superintendents that would aid in selecting the samples for the study. The intent of the questionnaire was to determine the career origins (whether career-bound or place-bound) of Iowa superintendents, and collect some information about their careers that might have relevance to other data collected.

The questionnaire asked the following questions:

1. How many years have you held your present superintendency? Include this year:\_\_\_\_\_.
2. How did you obtain your present superintendency?  
Check A or B:  
A. I was promoted from within this same district.\_\_\_\_

- B. I was elected from a different school district.\_\_\_\_
3. Before you were promoted or elected to your present superintendency, what position did you hold? Check A, B, or C and fill corresponding blank:
- \_\_\_\_A. Another position in this same district. Position title:\_\_\_\_. # of years\_\_\_\_
- \_\_\_\_B. Superintendent in a different school district. # of years\_\_\_\_.
- \_\_\_\_C. Other. Title of position\_\_\_\_. # of years\_\_\_\_.
4. Age at which you obtained your FIRST superintendency:\_\_\_\_.

Questions one and four were for the purpose of gaining information that might be related to degree of career-boundedness or place-boundedness, since it was reasoned that truly career-bound men would have spent fewer years in their present positions, and would have become superintendents at an earlier age than place-bound men.<sup>1</sup> Question two was designed to determine career orientation; that is, whether career-bound (response B) or place-bound (response A). The third question was a check question. If inconsistencies in responses between questions two and three occurred, the questionnaire was considered to be spoiled, and the individual answering it was dropped from consideration for the samples. It was expected that career-bound men would check either response B or response C for question three, and place-bound men would check only response A, unless they had made an error in responding to question one. The complete

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<sup>1</sup>Richard O. Carlson, School Superintendents: Careers and Performance (Columbus: Charles E. Merrill, 1972), pp. 139-41 and p. 50, respectively.

Career Patterns Questionnaire, including directions to respondents, may be found in Appendix A.

The questionnaire was reviewed for clarity by several experts, including members of a university Department of Educational Administration, the Research Director of a professional teachers association, and selected superintendents.

Once the final format and content of the questionnaire had been approved, it was printed on cardstock by the offset method, to produce a neat-appearing instrument that would be durable enough to survive the mails. The questionnaire format was such that all the items would fit on one side of the card, and the card would fit the return envelope.

A cover letter was written to accompany the Career Patterns Questionnaire. After its content had been approved by the members of the investigator's Doctoral Committee, it was printed on Drake University letterhead. A facsimile of the letter may be found in Appendix A.

The cover letter and the Career Patterns Questionnaire were mailed, along with a self-addressed, stamped envelope, to all 449 superintendents in the state.

Within three weeks the return, without follow-up letters, totaled 418 questionnaires, for a return rate of 93 percent. Only four questionnaires were spoiled, due to inconsistencies in responses to questions two and three. This excellent rate of return was attributed to a combination of factors, among them: timing--day of week and month of year; convenience of responding--short questionnaire and stamped

return envelope; and appearance of the mailing--neatly printed materials, letterhead paper, and gummed address labels. These success factors very closely echoed the recommendations made by Selltitz, who said:

There are many factors that influence the percentage of returns to a questionnaire. Among the most important are: (1) the sponsorship of the questionnaire; (2) the attractiveness of the questionnaire format; (3) the length of the questionnaire; (4) the nature of the accompanying letter requesting cooperation; (5) the ease of filling out the questionnaire and mailing it back; (6) the nature of the people to whom the questionnaire is sent.<sup>1</sup>

Returned questionnaires were sorted according to the career orientations of the superintendents and the size categories (hereinafter called size strata) of the school districts. Eight categories of respondents were thereby created, and were designated by letters as shown below:

<u>Size Stratum</u>	<u>Pupil Enrollments</u>	<u>Number of Districts</u>	<u>Letter Designation</u>	
			<u>Career</u>	<u>Place</u>
I	over 1165	112	A	E
II	710 to 1165	113	B	F
III	455 to 709	113	C	G
IV	below 454	111	D	H

School district size strata enrollment ranges were chosen so that roughly the same number of school districts would fall within each stratum. The designation of groups of career- and place-bound superintendents by letters made

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<sup>1</sup>Claire Selltitz and others, Research Methods in Social Relations (New York: Holt, Rinehart and Winston, 1961), pp. 241-2.

reference to these groups easier. For instance, all career-bound superintendents regardless of stratum could be referred to simply as Group ABCD. The comparison of two groups could be described as Group A vs. Group B. This method of designating groups of superintendents will be used throughout the remainder of this report.

From the eight categories of respondents created as described above, two samples were drawn. All the place-bound superintendents responding to the Career Patterns Questionnaire comprised the place-bound sample. The career-bound sample was chosen by drawing career-bound superintendents at random from within each stratum. In all, 76 place-bound and 98 career-bound subjects were drawn.

The next step was to select those members of the administrative staffs of the subject superintendents to whom the LBDQ could be administered.

#### Administration of the LBDQ

The Iowa State Department of Public Instruction publishes each year a list of all members of the administrative staffs of all school districts, as well as support personnel, such as counselors and media specialists.<sup>1</sup> The most recent edition available at the time of the study was consulted to obtain a listing of the administrative and supportive

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<sup>1</sup>Iowa State Department of Public Instruction, Iowa Educational Directory 1973-74 School Year (Des Moines: Iowa State Department of Public Instruction, 1973).

personnel for each of the superintendents selected for the samples. Within each subject's staff, three individuals were selected to receive and fill out the LBDQ in terms of their perceptions of their superintendent's leader behaviors. The criterion used for selection was the closeness of the subordinates' positions to the superintendency. In the largest districts, the positions considered to be closest to the superintendency, from which three individuals were chosen, were those of Assistant Superintendent, Director of Secondary Education, Director of Elementary Education, Director of Curriculum, Director of Federal Programs, and Director of Guidance. In districts of intermediate size, the High School, Middle or Junior High School, and the Elementary Principals were considered closest to the superintendency. The smallest school districts often had only two administrative positions other than the superintendency. In those districts, the third questionnaire was administered to one of the support personnel listed, such as Guidance Counselors, Athletic Directors, or Media Specialists. In all, 522 individuals were selected to rate their superintendents with the LBDQ.

Permission was received from the Macmillan Publishing Company to use the LBDQ items listed by Halpin for the dimensions of Initiating Structure and Consideration.<sup>1</sup> These items were arranged alternately, so that items for the two dimensions would be intermixed. Six hundred LBDQ's were printed,

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<sup>1</sup>Andrew W. Halpin, Theory and Research in Administration (New York: Macmillan, 1966), pp. 88-9.

each on one side of a single sheet of legal-sized paper. A cover letter was written to accompany the questionnaires and printed on Drake University letterhead. These were mailed, along with a self-addressed, stamped envelope, to each of the 522 selected recipients. Facsimile of the LBDQ and the cover letter may be found in Appendix A.

An attempt was made to personalize the letters and envelopes through hand signing each letter and typing each envelope individually, rather than using gummed, pre-printed address labels, as had been done with the first questionnaire. The reasoning behind the extra attempts at personalization was that it would be necessary to impress each respondent with the importance of completing and returning the questionnaire, since it was thirty items long, and had been administered to only a few individuals in each district. The length of the item was not the only factor that had been anticipated as interfering with returns. It was also speculated that some potential respondents would be reluctant to rate their superintendent's leader behaviors for fear of misuse of the data. Therefore, care was taken to assure recipients that their responses would remain strictly confidential.

The returns from the LBDQ mailing were not as rapid as for the Career Patterns Questionnaire, but it was not found to be necessary to send follow-up letters. The final return, after six weeks, was 461 questionnaires, or a return rate of 88.3 percent. The excellent rate of return from this mailing was attributed to the same factors accounting



for the success of the first mailing.

Of the 174 superintendents originally selected for study, three ratings were secured for 118 of them, and two ratings were received for 48 of them. Only eight superintendents received less than two ratings. These eight were dropped from the study.

The number of ratings received per superintendent by category of career orientation are summarized below:

<u>Number of Ratings</u>	<u>Career-bound</u>	<u>Place-bound</u>	<u>Total</u>
three ratings	63	55	118
two ratings	30	18	48
less than two	5	3	8
totals	98	76	174

The rate of return of all three ratings was slightly better for place-bound subjects than for career-bound subjects--72.4 percent compared to 64.3 percent--but generalizations about apprehension levels among respondents in either group about the possible misuses of data by the investigator cannot be confirmed. It may be that place-bound superintendents' staffs felt less threatened by the opportunity to rate their superintendents' leader behaviors, but that speculation is unverified.

After all data had been collected, it was organized for computer processing as described in the next section.

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## PROCESSING OF DATA

Scoring

The 461 returned LBDQ's were hand scored using home-made overlays, one for the Initiating Structure dimension, and a separate one for the Consideration dimension. A total of 13,830 responses were scored. The scores for each dimension from each rater were entered on the back of the Career Patterns Questionnaire card that had been returned by the superintendent for whom the ratings were made. In this manner all the data for one superintendent were kept together. When all three ratings for a given superintendent had been received, scored, and recorded, the scores for each dimension were averaged. The average score thus obtained for each dimension was used as the score for that dimension for that superintendent, a practice recommended by Halpin.<sup>1</sup> The same procedure was later used for all superintendents for whom just two ratings were received, after it had become apparent that no more returns could be expected. The complete data for each superintendent thus consisted of his responses to the Career Patterns Questionnaire, an average Initiating Structure score, and average Consideration score, and a total average score, which was the sum of the Initiating Structure and Consideration average scores.

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<sup>1</sup>Halpin, Theory and Research in Administration, p. 90.

### Computer Processing

A card was keypunched for each superintendent, containing an identification number and data on five variables: (1) number of years in present position; (2) age at the time of obtaining the first superintendency; (3) Initiating Structure score; (4) Consideration score; (5) total score. The identification number contained the Iowa State Department of Public Instruction's school district identification number, and a two-digit code representing career orientation and school district size of the superintendent in question. The punched cards were sorted according to the eight lettered groups explained on page 86, and the statistical treatments were applied. The first treatment consisted of applying the technique of two-way analysis of variance to the data for each of the five variables. The computer program used for this analysis was the Statistical Analysis System.<sup>1</sup> This technique yielded f values for variance between career- and place-bound groups, for variance within groups according to school size, and for interaction between career groups and school district size. Where significant interaction was found between career groups and school district size, data were tested for simple main effects, using the procedure described by Kirk.<sup>2</sup> This test was used for variable two, age

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<sup>1</sup>Anthony J. Barr and James H. Goodnight, User's Guide to the Statistical Analysis System (Raleigh: Department of Statistics, North Carolina State University, 1972).

<sup>2</sup>Roger E. Kirk, Experimental Design: Procedures for the Behavioral Sciences (Belmont: Brooks/Cole Division, Wadsworth Publishing Co., 1968), pp. 180-81.

at time of first superintendency, only. After performing the test of simple main effects for this variable, one group, the place-bound superintendents, was found to have significant variance within itself. A post hoc test was used to make all possible comparisons of place-bound groups according to school district size. The test used for this pairwise comparison was Scheffe's S, which is given by

$$S = \sqrt{(k - 1)F_{\alpha; v_1, v_2}} \sqrt{MS_{\text{error}} \sum_{j=1}^k \frac{(C_j)^2}{n_j}}$$

where  $F_{\alpha; v_1, v_2}$  is the tabled value for F for  $v_1$  and  $v_2$  degrees of freedom,  $k$  is the number of treatment levels,  $C_j$  is a dummy variable representing the coefficient of the contrast (in this case, 1), and  $n$  is the number of scores in the  $j$ th treatment level.<sup>1</sup>

Pearson Product-Moment correlations were computed in an intercorrelation matrix for all five variables in each of the following arrangements of data: a) all superintendents in both samples (group ABCDEFGH); b) all career-bound superintendents sampled (group ABCD only); c) all place-bound superintendents sampled (group EFGH only); and d) each sample group individually (groups A, B, C, D, E, F, G, H separately). These correlations were computed according to the formula:

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<sup>1</sup>Kirk, op. cit., p. 91.

$$r_{XY} = \frac{\Sigma XY - \frac{(\Sigma X)(\Sigma Y)}{N}}{\sqrt{\left[ \Sigma X^2 - \frac{(\Sigma X)^2}{N} \right] \left[ \Sigma Y^2 - \frac{(\Sigma Y)^2}{N} \right]}}$$

where X and Y represent two variables for which a correlation may exist.<sup>1</sup>

The last treatment of the data was to compute Student's t values for the differences between means of the variables that were not found to have significant interaction between career group and school district size. The significance of the differences between means for each of the non-interacting variables was tested for all career-bound (group ABCD) superintendents against all place-bound superintendents (group EFGH). The formula for Student's t used was:<sup>2</sup>

$$t = \frac{\bar{X}_1 - \bar{X}_2}{s_{\bar{X}_1 - \bar{X}_2}}$$

where

$$s_{\bar{X}_1 - \bar{X}_2} = \sqrt{\frac{N_1 S_1^2 + N_2 S_2^2}{N_1 + N_2 - 2} \left[ \frac{1}{N_1} + \frac{1}{N_2} \right]}$$

The results obtained from the data analysis are presented in Chapter 4.

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<sup>1</sup>Dorothy C. Adkins, Statistics: An Introduction for Students in the Behavioral Sciences (Columbus: Charles E. Merrill, 1964), p. 265.

<sup>2</sup>John T. Roscoe, Fundamental Research Statistics for the Behavioral Sciences (New York: Holt, Rinehart and Winston, 1969), p. 139.

## Chapter 4

### PRESENTATION OF THE DATA

The data collected as described in Chapter 3 pertained to more than leader behavior alone. The Career Patterns Questionnaire collected several items of information which allowed comparisons of career- and place-bound superintendents on bases other than their leader behaviors. The presentation of the data collected for the study thus falls naturally into three parts: characteristics of superintendents in general; correlations between the five variables in the study; and comparisons of the leader behaviors of career- and place-bound superintendents.

#### SOME GENERAL CHARACTERISTICS OF IOWA SUPERINTENDENTS

Based on data collected from ninety-three percent of Iowa's 449 public school superintendents, it was possible to make comparisons of career- and place-bound superintendents in terms of distribution, number of years in their present positions, the age at which they obtained their first superintendencies, and the positions held immediately before obtaining their present superintendencies.

For two of these variables, number of years in present position and age at time of first superintendency, it was possible to compare the means of the combined samples with

the means for the same variables from the entire group of 418 returned questionnaires. This comparison yielded information about the degree to which the samples that were drawn were representative of superintendents in general. The means and standard deviations reported below show how closely the samples reflected the characteristics of the entire group of respondents.

<u>Variable</u>	<u>All Respondents</u>			<u>Combined Samples</u>		
	<u>N</u>	<u>Mean</u>	<u>S.D.</u>	<u>N</u>	<u>Mean</u>	<u>S.D.</u>
Yrs. Pres. Position	410	6.33	5.27	166	6.46	5.57
Age at 1st Sup'tcy.	409	34.02	6.02	165	34.62	5.98

The mean of the sample for the first variable, number of years in present position, is 0.29 standard errors above the mean of all respondents, indicating that, for this variable, the samples were nearly identical to the group from which they were drawn. For the variable of age at the time of first superintendency, the combined sample mean is 1.29 standard errors above the mean of all respondents. Again, the samples and the group from which they were drawn were nearly identical.

On the basis of the observed similarities between the combined samples and the general population of respondents, it was determined that any differences found between the two samples themselves would not be caused by sampling variability.

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### Distribution of Career- and Place-Bound Superintendents

Table I shows how career- and place-bound superintendents were distributed across 410 school districts. Although data were collected from 418 school districts, four of the questionnaires were impossible to categorize into career- or place-bound categories due to inconsistencies in responses (see pages 84-5), and four were later discarded due to poor handwriting, making the reading of numbers uncertain.

TABLE I

DISTRIBUTION OF IOWA CAREER- AND PLACE-BOUND  
SUPERINTENDENTS BY SCHOOL DISTRICT SIZE  
STRATUM, 1973-74 SCHOOL YEAR

Stratum*	Total Positions in Stratum	Number of Responses	Career-bound		Place-bound	
			Number	%	Number	%
I	112	104	78	75.0	26	25.0
II	113	108	86	79.6	22	20.4
III	113	107	91	85.1	16	15.0
IV	111	91	79	86.8	12	13.2
ALL	449	410	334	81.5	76	18.5

\*Enrollment limits for strata are shown on page 86.

Table I clearly shows that the frequency of occurrence of place-bound superintendencies was a function of school district size. In the largest districts (Stratum I), 25 percent of the superintendents responding were place-bound, whereas only 13.2 percent were place-bound in the smallest schools. The decline in percentage of place-bound



superintendents was uniform as school district size declined. Similar results were reported by Carlson, who found that about sixty-one percent of superintendents in the largest districts were place-bound, whereas only 23 percent were place-bound in the smallest schools.<sup>1</sup>

The average percentage of place-bound superintendents for all school size strata was 18.5 percent. This differs from the results reported by Carlson, who found that about 35 percent of all school superintendents were place-bound in his investigations.<sup>2</sup> Carlson was working with larger school districts, however. The smallest school districts in his study were in communities of at least 2,500 population, which would exceed the population of any district in Stratum IV and the vast majority of districts in Stratum III of this study.<sup>3</sup> Comparisons of Table I with Carlson's data shows that the information from Strata III and IV of this study could be used to extend the lower limits of the data Carlson reported.

The finding that the proportion of place-bound superintendents is related to school district size is reasonable when sizes of administrative staffs are compared. In the largest districts, the probability of finding a suitable

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<sup>1</sup>Richard O. Carlson, Executive Succession and Organizational Change (Chicago: Midwest Administrative Center, University of Chicago, 1962), p. 14.

<sup>2</sup>Ibid., p. 13.

<sup>3</sup>Data on populations of Iowa school districts were obtained from: Iowa State Department of Public Instruction, Iowa Educational Directory 1973-74 School Year (Des Moines: Iowa State Department of Public Instruction, 1973).

candidate for a vacant superintendency would logically be greater where the size of the administrative staff is larger. In the smallest schools, it is likely that persons having the required certificate for the superintendency are relatively few. Finally, grooming of candidates for the superintendency, in the sense of promoting them through the ranks, is far more likely to occur in the largest districts.

### Years in Present Position

Table II reports the results of the two-way analysis of variance that was performed on variable one, years in present position. The only significant *f* value is that for between-group interaction, which yielded a value of 8.31, significant at the .05 level of confidence. Career- and place-bound superintendents are thus shown to differ measurably in years in present position. No important interaction was found for this variable between career orientation and school district size, or between size strata alone.

TABLE II

ANALYSIS OF VARIANCE FOR VARIABLE ONE, YEARS IN  
PRESENT POSITION OF IOWA CAREER- AND PLACE-  
BOUND SUPERINTENDENTS, 1973-74 SCHOOL YEAR

Source	Degrees of Freedom	Sums of Squares	Mean Square	<i>f</i> Value
Group (C.B.-P.B.)	1	250.29	250.29	8.31 <sup>a</sup>
Size of School	3	185.06	61.69	2.05
Interaction	3	167.00	55.67	1.85
Residual	157	4,730.72	30.13	---

<sup>a</sup>Significant at the .05 level.

The average number of years that career-bound and place-bound superintendents have occupied their present positions are shown in Table III.

TABLE III

AVERAGE NUMBER OF YEARS IN PRESENT POSITION OF IOWA  
CAREER- AND PLACE-BOUND SUPERINTENDENTS BY SCHOOL  
DISTRICT SIZE STRATUM, 1973-74 SCHOOL YEAR

Strata*	Career-bound			Place-bound			t Value
	N	Mean	S.D.	N	Mean	S.D.	
ALL	93	5.38	5.07	73	7.85	6.15	-2.84 <sup>a</sup>
I	33	6.42	5.65	26	6.15	3.31	---
II	24	4.83	3.91	21	8.57	5.30	---
III	21	6.33	6.14	16	10.13	8.92	---
IV	15	2.60	2.03	10	7.10	7.58	---

<sup>a</sup>Significant at the .05 level on a two-tailed test.

\*Strata designations are shown on page 86.

The second and third columns report the means for the two samples, and the last column shows the t value for the differences between the means of the two samples. A negative t value indicates that place-bound means were higher than career-bound means. Averages are shown for all schools in aggregate, and for each size stratum.

The data reported in Table III shows that, on the average, place-bound superintendents have occupied their present positions longer than career-bound men, except for Stratum I, where the difference is slightly in favor of

career-bound superintendents.

An examination of the breakdown by school size in Table III reveals that, in the largest schools, there is virtually no difference in the average length of present term in office between the two groups, but that the difference between means increases as school size decreases. In Stratum II, the difference between career-bound and place-bound men in average terms in office is 3.74 years. In Stratum III, the difference is 3.80 years; in Stratum IV, 4.60 years. Stated another way, it may be said that the difference between career- and place-bound superintendents in term of office becomes more apparent in the smallest schools.

This information lends strength to the career-bound/place-bound dichotomy. Place-bound men, especially in the smaller schools, tend to stay where they are, once having attained their superintendencies. Career-bound men, on the other hand, stay comparatively briefly in the smaller schools, perhaps moving to larger districts after first "trying out" the superintendent's role in a small school. In the largest districts, the lack of difference between the two career types in terms of office may indicate that career-bound men in this school size bracket are more satisfied with the size of the schools they operate, and thus stay longer. The smaller schools may be a training ground for the career-bound men who later provide experienced leadership for larger schools.

Carlson reported similar findings, showing that place-bound men tended to remain in their positions, once having

attained them, measurably longer than career-bound men. (See Chapter 2, pages 73-74, of this report.)

### Age at First Superintendency

The second variable, age at the time of first superintendency, was subjected to a two-way analysis of variance, testing for interaction between career orientation and school size. The results of that analysis are shown in Table IV.

TABLE IV

ANALYSIS OF VARIANCE FOR VARIABLE TWO, AGE AT TIME OF  
FIRST SUPERINTENDENCY FOR CAREER- AND PLACE-BOUND  
SUPERINTENDENTS, 1973-74 SCHOOL YEAR

Source	Degrees of Freedom	Sums of Squares	Mean Square	f Value
Group (C.B.-P.B.)	1	1,390.15	1,390.15	43.55 <sup>a</sup>
Size of School	3	200.67	66.89	2.10
Interaction	3	622.29	207.43	6.50 <sup>a</sup>
Residual	157	5,011.84	31.92	---

<sup>a</sup>Significant at the .001 level.

Two significant *f* values were revealed by the analysis of variance. Career- and place-bound superintendents were found to differ greatly in terms of this variable; the *f* value of 43.55 is significant at the .001 level of confidence. Career orientation was found to interact with school size, the interaction yielding an *f* value of 6.50, significant at the .001 level of confidence. No important interaction among size strata was found. Since a great degree of interaction was found between career orientation and school size, a test for

simple main effects of the interaction was performed, the results of which are shown in Table V.

TABLE V

SIMPLE MAIN EFFECTS OF INTERACTION BETWEEN CAREER ORIENTATION AND SCHOOL DISTRICT SIZE IN TERMS OF VARIABLE TWO FOR IOWA CAREER- AND PLACE-BOUND SUPERINTENDENTS, 1973-74 SCHOOL YEAR

Source*	Degrees of Freedom	Sums of Squares	Mean Square	f Value
Groups A,E	1	1,745.48	1,745.48	54.68 <sup>b</sup>
Groups B,F	1	57.91	57.91	1.81
Groups C,G	1	56.11	56.11	1.76
Groups D,H	1	177.13	177.13	5.55 <sup>a</sup>
Groups ABCD	3	241.42	80.47	2.52 <sup>b</sup>
Groups EFGH	3	581.54	193.85	6.07 <sup>b</sup>
Residual	157	5,011.84	31.92	---

<sup>a</sup>Significant at the .05 level.

<sup>b</sup>Significant at the .01 level.

\*Letter designations of the groups are described on page 86.

Career- and place-bound groups of superintendents differed markedly in age at the time of first superintendency in two strata. In size Stratum I, groups A and E (career-bound and place-bound respectively) differed enough to yield an f value of 54.68, significant at the .01 level of confidence. Groups D and H (career- and place-bound, respectively, in size Stratum IV) also differed markedly, earning an f value of 5.55, which is significant at the .05 level of confidence.

Table V also shows that place-bound superintendents (Group EFGH) differ greatly among themselves in terms of age

at the time of first superintendency. The  $f$  value for this group was 6.07, significant at the .01 level of confidence. Career-bound superintendents (group ABCD) were not found to have significant within-group variance.

The nature of the within-group variance for place-bound superintendents was explored using Scheffe's  $S$ , as reported in Table VI below.

TABLE VI

S VALUES FOR MEAN DIFFERENCES IN AGE AT TIME OF FIRST SUPERINTENDENCY FOR PAIRWISE COMPARISONS OF GROUPS OF IOWA PLACE-BOUND SUPERINTENDENTS 1973-74 SCHOOL YEAR

Place-bound Groups*	S Value
Stratum I vs II . . . . .	5.22 <sup>a</sup>
Stratum I vs III . . . . .	6.76 <sup>b</sup>
Stratum I vs IV . . . . .	1.58
Stratum II vs III . . . . .	1.54
Stratum II vs IV . . . . .	-3.64
Stratum III vs IV . . . . .	-5.19

<sup>a</sup>Significant at the .05 level.

<sup>b</sup>Significant at the .01 level.

\*Strata designations explained on page 86.

Data in Table VI indicate that the greatest differences in age at the time of first superintendency were between place-bound men in Stratum I versus place-bound men in Stratum III and Stratum II. Place-bound superintendents in Stratum I apparently have to wait longer for promotion than those in Strata III and II. Place-bound men in Stratum IV also wait longer to receive promotion than those in Strata II and III,

but the differences may have failed to reach statistical significance due to the small number of place-bound men in Stratum IV.

Added evidence that career-bound and place-bound superintendents differ from one another as groups is shown in Table VII.

TABLE VII

AVERAGE AGE AT TIME OF FIRST SUPERINTENDENCY OF IOWA  
CAREER- AND PLACE-BOUND SUPERINTENDENTS BY SCHOOL  
DISTRICT SIZE STRATA, 1973-74 SCHOOL YEAR

Strata*	Career-bound			Place-bound			f Value
	N	Mean	S.D.	N	Mean	S.D.	
ALL	92	32.03	5.07	73	37.88	6.97	---
I	33	30.12	4.11	26	41.08	8.34	54.68 <sup>b</sup>
II	24	33.58	5.16	21	35.86	4.96	1.81
III	20	31.80	4.96	16	34.31	4.16	1.76
IV	15	34.07	5.81	10	39.50	6.90	5.55 <sup>a</sup>

<sup>a</sup>Significant at the .05 level on a two-tailed test.

<sup>b</sup>Significant at the .01 level on a two-tailed test.

\*Strata designations are shown on page 86.

Place-bound superintendents were generally older than career-bound superintendents at the time of attaining their first superintendencies, regardless of the way in which the data were broken down. These differences were significant at the .01 level in Stratum I (the largest schools), and at the .05 level in Stratum IV. The tendency for place-bound men to



wait for promotion to the superintendency within their districts, rather than to actively seek the superintendency elsewhere, is revealed by these figures.

The combined data from Tables VI and VII show that:  
a) place-bound superintendents wait longer to become superintendents than do career-bound superintendents, measurably so in Strata I and IV; and b) among place-bound men, those in the largest schools wait far longer than any other place-bound group.

The finding that place-bound men wait much longer than career-bound men to become a superintendent in the largest schools is reasonable in view of the size of the administrative staffs in large school districts. A career-bound man does not wait to be promoted through the ranks; he actively seeks a superintendency. Consequently, his first superintendency is likely to come at an earlier age than it would if he had waited for promotion within his school, as a place-bound man does. The mechanism of promotion logically takes longer in the larger schools, where more administrative staff positions exist.

These findings, like those on the number of years in the present position, lend support to the career-bound/place-bound dichotomy, and echo the findings of Carlson, who also found that place-bound superintendents are older than career-bound men at the time of first attaining the superintendency.<sup>1</sup>

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<sup>1</sup>Richard O. Carlson, School Superintendents: Careers and Performance (Columbus: Charles E. Merrill, 1972), p. 51.

### Previous Positions

The third question on the Career Patterns Questionnaire was designed to gain information about the positions held by superintendents immediately before being promoted or appointed to their present offices. These findings are summarized in Table VIII.

The information reported in this table is based on data from all superintendents from which the Career Patterns Questionnaire was received. Over half (66.9%) of the career-bound superintendents had been superintendents before taking their present positions. 15.7 percent had been high school principals just before becoming a superintendent, and 17.4 percent had been in some other position, such as assistant superintendents, elementary or junior high principals, college professors, consultants, and the like. When broken down by school district size, the table shows that the percentage of career-bound men who had previously been superintendents declines as school sizes become smaller. In Stratum I, 80 percent of the career-bound men had previously been superintendents, with the vast majority of the remaining 20 percent coming from positions other than high school principals. In Stratum IV, less than half the career-bound men had been superintendents before, the remaining half being almost evenly divided between having previously been high school principals or incumbents of other positions. The figures for Stratum I may reflect a greater desire for experienced superintendents in the larger schools, with boards preferring to hire

TABLE VIII

PREVIOUS POSITIONS AND AVERAGE TERMS IN OFFICE IN PREVIOUS POSITIONS OF IOWA CAREER-  
AND PLACE-BOUND SUPERINTENDENTS, 1973-74 SCHOOL YEAR

Group*	N	Superintendent		H.S. Principal		All Other Offices	
		Pct.	Term (yrs.)	Pct.	Term (yrs.)	Pct.	Term (yrs.)
Career-bound, All	334	66.9	6.31	15.7	6.15	17.4	4.00
Group A	78	80	6.60	3	7.33	17	3.00
Group B	86	72	6.02	13	10.18	15	4.15
Group C	91	70	6.29	19	6.44	11	3.82
Group D	79	46	6.11	28	4.04	26	4.68
Place-bound, All	76	--	---	68	5.04	32	4.96
Group E	26	--	---	52	3.64	48	5.62
Group F	22	--	---	70	3.21	30	3.83
Group G	16	--	---	75	5.33	25	4.50
Group H	12	--	---	100	9.20	--	---

\*Letter designations of groups are explained on page 86.

those who had been superintendents before, or who had been assistant superintendents, college teachers or consultants. The career-bound superintendents who reported having previously been superintendents show a uniformity among the size strata in the average number of years spent in the previous position. The average length of term in previous position is just over six years, slightly more than the average number of years in present position reported in row one of Table III.

The average length of stay for "non-experienced" career-bound men (that is, those who had not previously been a superintendent) is shown in Table VIII to have been just over six years for those coming from the high school principalship, and four years for those coming from other positions. This difference remains when the data are broken down according to school size, except in the smallest schools. These data suggest that career-bound men who were previously high school principals may have been less eager to become superintendents than those who were previously incumbents of other positions.

Table VIII also reports the previous positions of place-bound superintendents. The majority of them came from the high school principalship, although the percentages vary according to school size. In the largest districts, almost half (48 percent) of the place-bound men were previously in positions other than high school principal, perhaps because more alternative administrative positions exist in the larger schools. In the smallest schools, all place-bound men had

previously been high school principals.

The average length of term in the previous position for place-bound men was 5.04 years for those who had been high school principals, and 4.96 years for those who had held other positions. For those who had been high school principals, the length of term in office increased as school size decreased. In Stratum I, the average length of term was 3.64 years; in Stratum IV, the average term was 9.2 years. This greater length of term as high school principal in the smallest schools suggests that these men may have placed a lower value on becoming a superintendent than their place-bound counterparts in larger schools.

The average length of term in other positions is not greatly different between career- and place-bound superintendents, Table VIII shows. The exception to this is in Stratum I, where career-bound men spent an average of three years in previous other positions, and place-bound men spent an average of 5.6 years in their previous other positions. This evidence indicates that place-bound men in the largest schools spent more time in working up to the superintendency than career-bound men.

#### CORRELATIONS BETWEEN VARIABLES

The five variables in the study were plotted against each other in a series of scatterplots, which may be found in Appendix B, pages 155-65. All the relationships plotted were found to be either circular or linear; no curvilinear

relationships were found. The correlations reported in this section may therefore be viewed as correct.

### Correlations with Term of Office

Correlations were first calculated between variable one, years in present position, and each of the other four variables. Intercorrelations were calculated for eleven groupings of subjects, as shown in Table IX. Correlations for all superintendents in the study, regardless of school size or career orientation, are shown in the first row. The next five rows show the correlation for career-bound superintendents as an entire group, and separately according to school district size stratum, beginning with the largest. The same breakdown is reported for place-bound superintendents in the last five rows of the table.

The correlations between number of years in present superintendency and age at the time of first superintendency are generally negative, with the stronger negative correlations being among place-bound men. This relationship for place-bound men is logical.

Among those who are still in their first superintendencies, as all place-bound men are, those who attained their positions at an early age would logically be found to have occupied that position longer than those who attained it at a later age. The correlation between years in present position and age at time of first superintendency should therefore be negative for place-bound superintendents. Furthermore,

among groups of place-bound superintendents, the stronger the correlation, the greater the degree of place-boundedness.

TABLE IX

CORRELATIONS BETWEEN NUMBER OF YEARS IN PRESENT POSITION  
AND FOUR OTHER VARIABLES FOR IOWA CAREER- AND PLACE-  
BOUND SUPERINTENDENTS, 1973-74 SCHOOL YEAR

Group*	N	Age, Time of First Sup't.	Structure Score	Consid. Total Score Score
All groups	166	-0.12	-0.24 <sup>c</sup>	-0.16 <sup>a</sup> -0.22 <sup>b</sup>
Groups ABCD	93	- .07	- .15	- .11 - .14
Group A	33	- .17	.02	.08 <sup>b</sup> .05 <sup>b</sup>
Group B	24	- .20	.49 <sup>b</sup>	.39 <sup>b</sup> .52 <sup>b</sup>
Group C	21	.36	.18	.07 - .14
Group D	15	.08	.22	.18 - .20
Groups EFGH	73	- .38 <sup>c</sup>	- .39 <sup>c</sup>	- .29 <sup>b</sup> - .37 <sup>c</sup>
Group E	26	- .28	.27	.43 <sup>a</sup> - .39 <sup>a</sup>
Group F	21	- .29 <sup>b</sup>	.34 <sup>a</sup>	.06 - .19 <sup>a</sup>
Group G	16	- .58 <sup>b</sup>	.47 <sup>b</sup>	.37 - .50 <sup>a</sup>
Group H	10	-0.39	-0.72 <sup>b</sup>	-0.44 -0.62 <sup>a</sup>

<sup>a</sup>Correlation significant at the .05 level.

<sup>b</sup>Correlation significant at the .01 level.

<sup>c</sup>Correlation significant at the .001 level.

\*Letter designations for groups explained on page 86.

A positive correlation between these two variables could be expected for career-bound superintendents who are still in their first superintendencies. However, two-thirds of the career-bound superintendents studied are not in their first superintendency (see Table VIII). The correlations between these two variables for career-bound superintendents, shown in Table IX, do not therefore conform to a pattern.

The strongest negative correlation between these two variables among place-bound men is found in Group G, which is in size Strata III. This group of superintendents has the longest mean term in present position (Table III) and the youngest mean age at time of first superintendency (Table VII) than any other group of place-bound superintendents. In light of the explanation above, this group of superintendents may be viewed as more place-bound than groups E, F, and H.

The correlations between years in present position and the leader behavior dimensions of Initiating Structure and Consideration, as well as Total LBDQ scores, are shown in Table IX, also. Most of the correlations are very weak. Of interest is the fact that these correlations are almost universally negative, indicating that leader behavior scores declined as years in present position increased. The strength of these negative correlations is generally greater for place-bound men than career-bound men. In Initiating Structure, the correlation for all place-bound groups (group EFGH) is  $-.39$ , and is significantly different from zero at the  $.001$  level of confidence. The same correlation for career-bound men (group ABCD) is  $-.15$ . The correlation for Consideration for all place-bound groups is  $-.29$ , significant at the  $.01$  level; for all career-bound groups, that correlation is  $-.11$ . The correlations between years in present position and Total LBDQ score are similar in strength and direction to those for the Structure and Consideration dimensions, since the three sets of scores are highly intercorrelated, as will be



shown later.

Place-bound men in Stratum IV (group H) and career-bound men in Stratum II (group B) show a strong negative relationship between their structure scores and their length of term in office. The correlations are  $-.72$  and  $-.49$ , respectively, both of which are significant at the  $.01$  level of confidence. Over half (51.8 percent) of the variability in Structure scores for Stratum IV place-bound men and roughly 25 percent of that variability for Stratum II career-bound men are accounted for by their lengths of term as superintendent. These men are perceived as being less structured the longer they have been in office. For career-bound men in Stratum I (group A), the correlations with all three leader behavior scores are so small as to indicate that no practical relationship exists.

Consideration scores generally declined in the same direction as Structure scores, Table IX shows. The strength of the decline is not as great as that for structure, however. The one exception is among place-bound superintendents in the largest schools (group E). These men are viewed by their administrative staffs as declining far more in Consideration than in Structure as their terms lengthen.

The Total LBDQ score was viewed by Brown as an Index of leader visibility.<sup>1</sup> If this is so, then the generally

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<sup>1</sup>Personal letter to the investigator from Dr. Alan Brown, dated April 2, 1974. Dr. Brown's work with the LBDQ has been reported in Chapter 2, page 32.

negative correlations between years in present position and Total LBDQ scores shown in Table IX indicate that the length of term in office adversely affects the administrative staff's view of their superintendents' visibility as leaders. This tendency is slightly stronger for place-bound superintendents than for career-bound men.

#### Correlations with Age at First Superintendency

Variable two, age at first superintendency, was correlated with Structure, Consideration, and LBDQ scores. These correlations are shown in Table X. The format for reporting them is the same as was used in Table IX.

TABLE X

CORRELATIONS BETWEEN AGE AT TIME OF FIRST SUPERINTENDENCY  
AND THREE OTHER VARIABLES FOR IOWA CAREER- AND PLACE-  
BOUND SUPERINTENDENTS, 1973-74 SCHOOL YEAR

Group*	N	Structure Score	Consideration Score	Total Score
All groups	166	0.07	0.11	0.10
Group ABCD	93	- .06	.02	- .02
Group A	33	- .17	- .09	- .14
Group B	24	- .13	.11	.15
Group C	21	- .02	.20	.12
Group D	15	- .22	- .18	- .20
Group EFGH	73	.09	.09	.10
Group E	26	.03	.03	.03
Group F	21	- .22	- .36	- .33
Group G	16	.06	.19	.15
Group H	10	0.69 <sup>a</sup>	0.61 <sup>a</sup>	0.69 <sup>a</sup>

<sup>a</sup>Correlation significant at the .05 level.

\*Letter designations for groups explained on page 86.

The correlations, except for group H, are very weak, indicating that age at time of first superintendency does not have a strong effect on administrative staffs' views of their superintendents' leader behaviors. The directions toward which the correlations tend are of interest.

Age at first superintendency was shown in Tables IV, V, and VII to be greatly different between career- and place-bound superintendents. It would thus be logical to expect the correlations between age at first superintendency and leader behavior scores to differ between career- and place-bound superintendents. Table X shows this to be true for Structure scores only. Age at first superintendency is negatively correlated with Structure scores of career-bound men and positively correlated for place-bound men, except group F. From these data it may be seen that, generally, the older a career-bound man was when he first became a superintendent, the lower his administrative staff rated his Structure scores. The Structure scores of place-bound superintendents on the other hand, tend slightly to rise with increases in age at first superintendency.

Correlations with Consideration scores in Table X do not show consistent patterns for career- or place-bound men, either in direction or degree, except for place-bound men in Stratum IV, group H.

The exception to the general pattern of the data in Table X is group H. Place-bound superintendents in the smallest schools who were older when they took office were

viewed as showing higher Structure, Consideration, and Total LBDQ scores than those who were younger at the time of promotion to the superintendency. The Structure-age correlation for group H is .69; for Consideration, .61; and for Total LBDQ, .69. All three correlations are significant at the .05 level of confidence.

#### Intercorrelations Between Leader Behavior Dimensions

Tables XI and XII show the intercorrelations between the three leader behavior measures. All are of moderate to high strength and all but one are significantly different from zero. The evidence from these tables shows that administrative staffs do not tend to view the Structure and Consideration dimensions as separate aspects of leader behavior.

High scores on Structure items are mildly to strongly predictive of high Consideration scores. For career-bound men, this effect is strongest in the largest and smallest schools (Table XI, groups D and A), and for place-bound men, the tendency to not differentiate between dimensions of leader behavior is strongest in Stratum IV (group H) only. In these districts, the leaders are not perceived as effectively displaying different amounts of Structure and Consideration, but are rather viewed as being the same in both dimensions.

TABLE XI

CORRELATIONS BETWEEN INITIATING STRUCTURE AND CONSIDERATION  
AND TOTAL LBDQ SCORES OF IOWA CAREER- AND PLACE-BOUND  
SUPERINTENDENTS, 1973-74 SCHOOL YEAR

Group*	N	Consideration Score	Total Score
All groups	166	0.65 <sup>c</sup>	0.88 <sup>c</sup>
Group ABCD	93	.67 <sup>c</sup>	.89 <sup>c</sup>
Group A	33	.79 <sup>c</sup>	.92 <sup>c</sup>
Group B	24	.43 <sup>a</sup>	.84 <sup>c</sup>
Group C	21	.49 <sup>a</sup>	.83 <sup>c</sup>
Group D	15	.93 <sup>c</sup>	.98 <sup>c</sup>
Group EFGH	73	.62 <sup>c</sup>	.87 <sup>c</sup>
Group E	26	.67 <sup>c</sup>	.90 <sup>c</sup>
Group F	21	.64 <sup>c</sup>	.87 <sup>c</sup>
Group G	16	.40	.81 <sup>c</sup>
Group H	10	0.77 <sup>b</sup>	0.94 <sup>c</sup>

<sup>a</sup>Correlation significant at the .05 level.

<sup>b</sup>Correlation significant at the .01 level.

<sup>c</sup>Correlation significant at the .001 level.

\*Letter designations for groups explained on page 86.

The correlations for Total LBDQ scores in both tables are reported only for the sake of thoroughness. The correlations are expectedly high, since the Total LBDQ score depends entirely on the Initiating Structure and Consideration scores.

TABLE XII

CORRELATIONS BETWEEN CONSIDERATION AND TOTAL LBDQ SCORES  
OF IOWA CAREER- AND PLACE-BOUND SUPERINTENDENTS,  
1973-74 SCHOOL YEAR

Group*	N	Total LBDQ Score <sup>a</sup>
All groups	166	0.93
Group ABCD	93	.93
Group A	33	.96
Group B	24	.85
Group C	21	.89
Group D	15	.99
Group EFGH	73	.92
Group E	26	.93
Group F	21	.94
Group G	16	.86
Group H	10	0.94

<sup>a</sup>All correlations significant at the .001 level.

\*Letter designations for groups explained on page 86.

The remainder of this chapter is devoted to reporting the means of the leader behavior scores for each dimension of the LBDQ, and comparing those means between career- and place-bound superintendents.

#### TESTS OF THE HYPOTHESES

##### Initiating Structure Scores

Table XIII gives the results of a two-way analysis of variance, testing for interaction in terms of Structure scores between career orientation and school district size.

No significant  $f$  values were found to exist, either within or between groups, or between career orientation and school size.

TABLE XIII

ANALYSIS OF VARIANCE FOR VARIABLE THREE, INITIATING  
STRUCTURE SCORES OF IOWA CAREER- AND PLACE-BOUND  
SUPERINTENDENTS, 1973-74 SCHOOL YEAR

Source	Degrees of Freedom	Sums of Squares	Mean Square	$f$ Value
Group (C.B.-P.B.)	1	104.38	104.38	2.42
Size of School	3	105.21	35.07	0.81
Interaction	3	143.13	47.71	1.11
Residual	157	6,765.69	43.09	---

Since no significant  $f$  values were found, the mean for career-bound structure scores and place-bound structure scores were tested for difference using Student's  $t$ . The means and standard deviations for all groups of subject superintendents are shown in Table XIV. Since no interaction between career orientation and school size was found,  $t$  values for the breakdowns by school size (rows 2-5 in Table XIV) are not reported, consistent with a policy of reporting only main effects.

Place-bound superintendents scored higher in Structure in all strata except Stratum II, where the difference between groups B and F is slightly in favor of Group B, the career-bound superintendents. The greatest difference in mean score is between groups C and G, the career- and place-bound groups

in Stratum III.

TABLE XIV

COMPARISONS OF INITIATING STRUCTURE SCORES OF IOWA  
CAREER- AND PLACE-BOUND SUPERINTENDENTS BY SCHOOL  
DISTRICT SIZE STRATUM, 1973-74 SCHOOL YEAR

Groups*	Career-bound			Place-bound			t Value
	N	Mean	S.D.	N	Mean	S.D.	
ABCD vs EFGH	93	38.84	6.34	73	40.52	6.84	-1.63
A vs E	33	39.67	6.56	26	41.60	7.07	---
B vs F	24	39.88	6.23	21	39.70	6.68	---
C vs G	21	36.40	6.24	16	41.23	6.05	---
D vs H	15	38.77	5.83	10	38.30	7.98	---

\*Letter designations for groups explained on page 86.

The t value for the difference between the means of the Structure scores for career- and place-bound superintendents is shown to be -1.63. This value does not reach the level required for significance at the .05 level on a two-tailed test ( $\pm 1.96$ ), therefore, the hypothesis that there is no difference in Initiating Structure behavior between career- and place-bound superintendents must be retained.

#### Consideration Scores

The results of a two-way analysis of variance for Consideration scores are given in Table XV. As was true for the Structure scores, no significant f values were found to exist, either between or within groups, or between career orientation and school size.



TABLE XV

ANALYSIS OF VARIANCE FOR VARIABLE FOUR, CONSIDERATION  
SCORES OF IOWA CAREER- AND PLACE-BOUND  
SUPERINTENDENTS, 1973-74 SCHOOL YEAR

Source	Degrees of Freedom	Sums of Squares	Mean Square	f Value
Group (C.B.-P.B.)	1	173.99	173.99	2.70
Size of School	3	433.16	144.39	2.24
Interaction	3	167.92	55.97	0.87
Residual	157	10,119.96	64.46	---

The means and standard deviations of the Consideration scores are shown in Table XVI. In keeping with a policy of reporting main effects, only the t value for the difference between means of career- and place-bound superintendents as whole groups is reported.

TABLE XVI

COMPARISONS OF CONSIDERATION SCORES OF IOWA CAREER- AND  
PLACE-BOUND SUPERINTENDENTS BY SCHOOL DISTRICT SIZE  
STRATUM, 1973-74 SCHOOL YEAR

Groups*	Career-bound			Place-bound			t Value
	N	Mean	S.D.	N	Mean	S.D.	
ABCD vs EFGH	93	38.62	7.77	73	40.82	8.59	-1.73
A vs E	33	39.59	8.12	26	42.45	8.72	---
B vs F	24	39.12	6.47	21	38.86	9.82	---
C vs G	21	34.52	7.62	16	40.04	7.08	---
D vs H	15	41.42	7.62	10	41.93	7.87	---

\*Letter designations for groups explained on page 86.

The scores for place-bound superintendents are higher than those for career-bound men in each case except Stratum II (groups B vs. F) where the career-bound mean is slightly higher.

The greatest difference between means was found in Stratum III, groups C and G, as was true for the Initiating Structure scores.

The  $t$  value shown for the difference between means of career- and place-bound superintendents is  $-1.73$ . This value is higher than that found for Structure scores, but does not reach the value required to reject the null hypothesis at the  $.05$  level. The hypothesis of no difference in Consideration behaviors between career- and place-bound superintendents is therefore retained.

#### Total LBDQ Scores

Although no null hypothesis was stated for differences in Total LBDQ scores between the two groups of superintendents, an analysis of variance was performed on this variable, and a  $t$  value was calculated for the difference between means.

Table XVII shows the results of the analysis of variance. No significant  $f$  values were found. The highest variance was between groups, which yielded an  $f$  value of  $2.94$ , indicating that the two groups differ somewhat in respect to Total LBDQ score, although not greatly.

TABLE XVII

ANALYSIS OF VARIANCE FOR VARIABLE FIVE, TOTAL LBDQ SCORES  
OF IOWA CAREER- AND PLACE-BOUND SUPERINTENDENTS,  
1973-74 SCHOOL YEAR

Source	Degrees of Freedom	Sums of Squares	Mean Square	f Value
Group (C.B.-P.B.)	1	519.07	519.07	2.94
Size of School	3	775.82	258.61	1.46
Interaction	3	611.40	203.80	1.15
Residual	157	27,717.53	176.54	---

Table XVIII reports the means and standard deviations of the Total LBDQ scores for the two groups of superintendents. As was true for the Structure and Consideration dimensions, place-bound means are higher than career-bound means except in Stratum II. The greatest difference between means was again found between groups C and G. Evidently, career- and place-bound superintendents are least alike in leader behaviors in Stratum III schools

TABLE XVIII

COMPARISONS OF TOTAL LBDQ SCORES OF IOWA CAREER- AND  
PLACE-BOUND SUPERINTENDENTS BY SCHOOL DISTRICT  
SIZE STRATUM, 1973-74 SCHOOL YEAR

Groups*	Career-bound			Place-bound			t Value
	N	Mean	S.D.	N	Mean	S.D.	
ABCD vs EFGH	93	77.56	13.00	73	81.34	13.91	-1.80
A vs E	33	79.57	14.13	26	84.04	14.46	---
B vs F	24	79.01	10.73	21	78.56	15.02	---
C vs G	21	70.87	11.92	16	81.27	11.00	---
D vs H	15	80.19	13.22	10	80.23	14.91	---

\*Letter designations for groups explained on page 86.

The  $t$  value reported for the difference between the Total LBDQ mean scores for career- and place-bound superintendents is  $-1.80$ , which falls short of the value needed to achieve significance at the  $.05$  level. The two groups of superintendents are not found to differ markedly in mean Total LBDQ score.

The fact that higher mean scores were obtained by place-bound, rather than career-bound superintendents on all three leader behavior measures may be due to one of two possibilities. The first is that a "halo effect" may exist among the administrative staffs of place-bound superintendents. It may be that place-bound men, having a longer history in the school district, are more well-known to their administrative subordinates, and are rated higher by them because of personal ties. It may also be true that some members of the administrative staffs of place-bound superintendents gained their positions because of the advancement of the place-bound men into the superintendency, leaving the subordinate positions vacant. Either of these situations could affect administrative staff members' perceptions of their superintendents' leader behaviors. The second possibility is that place-bound men actually display higher levels of Initiating Structure and Consideration than do career-bound men, although this is contrary to what would be expected, according to the literature cited in Chapter 2. The data do not indicate which possibility is correct.

## Chapter 5

### SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The most important leadership role in education may well be that of the superintendent. The style of leadership he displays affects the entire school system and community. Study of factors relating to the ways in which these leaders behave is warranted, in light of the vast quantities of human and material resources placed under their control.

Two types of superintendents have been identified in the literature. Career-bound superintendents were identified as those who were elected from outside the districts they presently lead. Those who were promoted to the superintendency from within their present school districts were identified as place-bound.

Place-bound superintendents were further defined as those who valued place above career; who would prefer to wait for promotion within their schools rather than actively seek a superintendency elsewhere. Career-bound men, on the other hand, were believed to value career above place; to actively seek a career as a superintendent, regardless of where that career would take them.

Place-bound superintendents were found in the literature to differ from career-bound men in many respects. Differences between the two types were found to exist in

reference group orientation, number and content of rules made, prestige and salary levels, number of years in present position, and age at which they first became superintendents.

This study was conducted to determine whether career orientation, i.e., whether career- or place-bound, affected the leader behaviors of superintendents, as measured by the Leader Behavior Description Questionnaire (LBDQ), an instrument developed for the Ohio State Leadership Studies.

The LBDQ measures two aspects of a leader's behavior, called Initiating Structure and Consideration. Initiating Structure refers to the actions of the leader in delineating the relationship between himself and his subordinates, and in organizing to accomplish tasks. Consideration behaviors are those directed toward warmth, respect, and mutual understanding between the leader and his subordinates. Effective leaders were found in the literature to score high on both dimensions. The instrument is designed to be used by subordinates to rate the frequency with which their leaders engage in the behaviors described in the questionnaire.

It was reasoned that, if career- and place-bound superintendents were found to differ from each other in leader behaviors, the results of this study would be of interest to all concerned with educational leadership, and would serve as useful input for their decisions.

Two null hypotheses were tested in this study. They were:

Hypothesis one: There are no differences in Initiating Structure behavior between career-bound and place-bound public school superintendents in Iowa.

Hypothesis two: There are no differences in Consideration behavior between career-bound and place-bound public school superintendents in Iowa.

The collection of data for the study fell naturally into two parts, identification of career- and place-bound superintendents, and measurement of their leader behaviors through the administration of the LBDQ to members of their administrative staffs.

A Career Patterns Questionnaire, designed by the investigator, was administered by mail to all Iowa public school superintendents. Results from this questionnaire were used to select the samples for the study.

The LBDQ was administered by mail to selected members of the administrative staffs of the subject superintendents. Returned LBDQ's were hand scored. For each superintendent, the Initiating Structure and Consideration scores were averaged separately, and the average scores were treated as the actual Initiating Structure and Consideration scores for that superintendent.

A data card was keypunched for each superintendent that contained information on five variables: number of years in present position, age at the time of first becoming a superintendent, Initiating Structure score, Consideration score, and Total LBDQ score. Total LBDQ score was included as a variable because it was felt by one authority to be a

measure of leader visibility.

Statistical treatments used were, as appropriate, analysis of variance, Scheffe's S, Pearson Product-Moment correlations, and calculation of Student's t.

## SUMMARY OF FINDINGS

### General Characteristics of Iowa Superintendents

1. The percentage of Iowa school superintendents who are place-bound varies according to school size. In the largest schools, 25.0 percent of superintendents were place-bound, and in the smallest schools 13.2 percent of superintendents were place-bound. The decline in the percentage of place-bound superintendents was uniform as school district size decreased.

2. Career- and place-bound superintendents differ significantly (at the .05 level of confidence) in number of years in present position. Place-bound superintendents tend to stay longer in their positions than career-bound men. The place-bound superintendents in Stratum III have occupied their present positions longer than all other groups of superintendents. Among career-bound men, those in Stratum IV have the fewest number of years in their present positions; those in Stratum I have the most, perhaps because of satisfaction with the size of the schools they lead.

3. Career- and place-bound superintendents differed significantly in age at the time of the first superintendency only in the largest and the smallest school districts.



Analysis of variance showed school district size to be an intervening variable affecting the differences between the two groups of superintendents in age at the time of first superintendency. In all school district sizes, place-bound men were older than their career-bound counterparts when attaining their first superintendency. In the largest schools, place-bound men were an average of 10.96 years older than career-bound men at the time of attaining their first superintendency. In the smallest schools, place-bound men were an average of 5.43 years older than career-bound men at the time of first superintendency. In the other two school district size categories, place-bound men were an average of 2.28 to 2.51 years older than career-bound men at the time of attaining their first superintendency. Place-bound superintendents were also found to differ significantly among themselves in terms of this variable. Place-bound superintendents in Stratum I, the largest school districts, were significantly older at the time of first superintendency than those in school district size Strata II and III.

4. The majority of career-bound superintendents had been superintendents before being elected to their present positions. 66.9 percent of all career-bound men had previously been superintendents. This proportion varied according to school district size. Eighty percent of career-bound superintendents in the larger schools had previously been superintendents, whereas 46 percent of career-bound superintendents in the smaller schools had previously been

superintendents. The decline in percentage of career-bound superintendents who had previously been superintendents was uniform as school district size decreased. Career-bound superintendents who had not been superintendents in their previous positions were almost evenly divided between having previously been high school principals or incumbents of other positions except in the largest school districts. The average stay in previous positions for career-bound men was 6.31 years for those who had been superintendents, 6.15 years for those who had been high school principals, and 4.00 years for those who had been in other positions. When broken down according to school district size, some variation existed in lengths of term in previous position, especially among those who had been high school principals.

5. Sixty-eight percent of all place-bound superintendents had been high school principals immediately before attaining their present superintendencies. This proportion varied somewhat according to school district size. In the largest schools, 52 percent of place-bound superintendents had been high school principals immediately before being elected to the position of superintendent. In the smallest schools, 100 percent of the place-bound superintendents in this study had been high school principals immediately before promotion to the superintendency. The average length of stay in previous positions for place-bound men was 5.04 years for those who had been high school principals and 4.96 years for those who had been incumbents of other positions.

When broken down according to school district size, some variation existed in length of term in previous position among place-bound superintendents who had been high school principals immediately before promotion. Those in the largest schools spent an average of 3.64 years in the principalship before receiving promotion. In the smallest schools, the average term as high school principal before receiving promotion was 9.20 years.

### Correlations Between Variables

1. A weak negative correlation was found to exist between number of years in present position and Initiating Structure scores for both types of superintendents. These negative correlations were slightly stronger for place-bound men, especially those in Stratum IV, and for career-bound men in Stratum II. There was virtually no relationship between years in present position and Structure scores for career-bound superintendents in Stratum I.

2. A weak negative correlation existed between number of years in present position and Consideration scores for career-bound and place-bound superintendents. These negative correlations were slightly stronger for place-bound men, especially those in Stratum IV, and for career-bound men in Stratum II.

3. Weak negative correlations existed between number of years in present position and Total LBDQ (Leader Visibility) scores for both types of superintendents. These

negative correlations were slightly stronger for place-bound men, especially those in Stratum IV, and for career-bound men in Stratum II.

4. In all strata except Stratum I, both career- and place-bound men were perceived by their administrative staffs as declining more in Structure than in Consideration scores as length of term in office increased. In Stratum I, Consideration scores decreased more than Structure scores as term in office lengthened.

5. The correlation between number of years in present position and age at time of first superintendency functions as an index of place-boundedness for superintendents in their first superintendency.

6. Age at time of first superintendency was weakly negatively correlated with Initiating Structure scores for career-bound superintendents and weakly positively correlated with Initiating Structure scores for place-bound superintendents, except in the smallest school districts, where the positive correlation for place-bound superintendents was moderately strong.

7. There was a generally weak correlation between age at time of first superintendency and Consideration scores for all superintendents. No clear pattern of positive or negative correlation was found, except that the correlation between age at time of first superintendency and Consideration scores was moderately strong in the positive direction for place-bound superintendents in the smallest school districts.

8. Generally weak correlations between age at time of first superintendency and Total LBDQ scores were found to exist for all superintendents. No clear pattern of positive or negative correlations was found, except that the correlation between these two variables was moderately strong in the positive direction among place-bound superintendents in the smallest schools.

9. For all superintendents, Structure scores were found to be highly correlated with Consideration scores. Evidently, administrative staffs do not view Initiating Structure and Consideration as separate dimensions of a leader's behavior, especially in the smallest school districts.

#### Leader Behaviors

1. Place-bound superintendents' mean scores for Initiating Structure were higher than those of career-bound superintendents, although the differences were not significant at the .05 level on a two-tailed test. No significant interaction between career orientation and school district size was found for this variable.

2. The mean Consideration scores for place-bound superintendents were higher than those for career-bound superintendents although the differences were not significant at the .05 level on a two-tailed test. No significant interaction between career orientation and school district size was found for this variable.

3. Mean Total LBDQ scores for place-bound superintendents were higher than those for career-bound

superintendents although the differences were not significant at the .05 level on a two-tailed test. No significant interaction between career orientation and school district size was found for this variable.

4. The greatest differences in leader behavior scores were between career- and place-bound superintendents in Stratum III.

5. The data do not indicate whether higher leader behavior scores achieved by place-bound superintendents were due to actual differences in leader behavior or to a halo effect operating among administrative staffs of place-bound superintendents.

#### CONCLUSIONS

1. The hypothesis of no difference between career- and place-bound superintendents in Initiating Structure scores must be retained.

2. The hypothesis of no difference between career- and place-bound superintendents in Consideration scores must be retained.

3. Total LBDQ scores are not significantly different for career- and place-bound superintendents.

4. Place-bound superintendents waited longer to become superintendents than did career-bound men, and, once in their positions, tended to stay longer, especially in Stratum III.

5. Leader behavior scores declined as length of term

in office increased. This relationship was stronger for place-bound men, especially in Stratum IV, and for career-bound men in Stratum II.

6. Little relationship existed between age at time of first superintendency and leader behavior scores, except for place-bound men in Stratum IV. The older these men were at the time of first becoming a superintendent, the higher their Structure and Consideration scores.

7. Frequency of occurrence of place-bound superintendencies was directly related to school district size.

8. From the high degrees of correlation between the Initiating Structure scores and Consideration scores of both types of superintendents, it was evident that administrative staffs did not view them as separate aspects of their leaders' behavior.

9. It would appear that schools in Stratum IV serve as training grounds for career-bound superintendents.

10. It would appear that the mechanism of promotion through the ranks in the largest schools accounted for the greater mean age at the time of first superintendency noted for place-bound men in Stratum I.

11. Except in Stratum I, Structure scores declined more than Consideration scores as length of term in office increased. This relationship was true for both types of superintendents.

12. Place-bound men in Stratum III may be viewed as more place-bound than those in other strata, in terms of the

correlation between age at time of first superintendency and number of years in present positions.

13. Career- and place-bound superintendents were most unlike each other, in terms of leader behaviors, in Stratum III.

14. Analysis of variance showed that school district size did not interact significantly with career orientation for any variable except variable two--age at time of first superintendency.

15. In the smallest schools, the main route to the present superintendency for both types of superintendents was through the high school principalship. For place-bound men, the high school principalship was the main route to the superintendency in all school district sizes.

16. Carlson's contention that career-bound superintendents are the leaders of the profession cannot be confirmed or denied by this study.

#### RECOMMENDATIONS

1. Further study of this type should be so designed that a one-tailed test of significance can be used.

2. This study should be replicated, with LBDQ ratings secured from school board members and from teaching staff members to test whether there is a halo effect operating among the administrative staffs of place-bound superintendents.

3. Superintendents and school board members alike should be made aware that their perceived levels of



Initiating Structure, Consideration, and Leader Visibility (Total LBDQ score) decline as their terms in office increase. Place-bound men should be aware that this tendency is stronger for them than for career-bound superintendents.

4. Place-bound superintendents should seriously consider moving to another superintendency after having gained experience in their home districts.

5. The superintendency in the smallest school districts should be made more attractive to career-bound men, so that they stay longer than they presently do.

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## APPENDIXES

APPENDIX A  
QUESTIONNAIRES AND COVER LETTERS

### CAREER PATTERNS QUESTIONNAIRE

Please take a few moments to fill in the blanks below.  
This information will aid in selecting the actual  
sample for the study. All replies are strictly  
confidential.

Identification (for ease of data-  
handling only):

School District # \_\_\_\_\_ - \_\_\_\_\_

Official Name of School District: \_\_\_\_\_

1. How many years have you held your present superintendency? Include this year: \_\_\_\_\_
2. How did you obtain your present superintendency? Check A or B:
  - A. I was promoted from within this same district. \_\_\_\_\_
  - B. I was elected from a different school district. \_\_\_\_\_
3. Before you were promoted or elected to your present superintendency, what position did you hold? Check A, B, or C and fill corresponding blank:
  - \_\_\_\_ A. Another position in this same district. Position title: \_\_\_\_\_ .#of yrs. \_\_\_\_
  - \_\_\_\_ B. Superintendent in a different school district. # of years: \_\_\_\_\_ .
  - \_\_\_\_ C. Other. Title of position: \_\_\_\_\_ .#of yrs. \_\_\_\_
4. Age at which you obtained your FIRST superintendency: \_\_\_\_\_ .

**DRAKE UNIVERSITY**

DES MOINES, IOWA 50311

COLLEGE OF EDUCATION

January 1974

Dear Administrative Colleague:

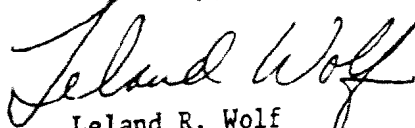
As a graduate student at Drake University, I am undertaking through the Department of Educational Administration, College of Education, a study of the superintendency in Iowa.

Enclosed is a short questionnaire that will aid in determining the sample for the study. It should take no more than five minutes of your time to fill out and mail it in the return envelope provided. Those five minutes will be valuable as a contribution to the search for greater knowledge in the field of educational administration.

All replies will be kept in the strictest confidence. No one, except those involved in conducting the study, will have access to the data from the questionnaires. The final study will not mention specific individuals or school districts; data will be tabulated according to size categories of school districts.

The school superintendency has been described as perhaps the most cross-pressured role in American education. The study of the Iowa superintendency promises to be an interesting one. Let me take this opportunity to thank you in advance for your assistance.

Sincerely,



Leland R. Wolf  
Graduate Student, Educational Administration

## LEADER BEHAVIOR DESCRIPTION QUESTIONNAIRE\*

The following items describe possible aspects of a leader's behavior. Respond to each item according to the way you perceive that your present superintendent behaves. Circle whether he behaves in the described way always (A), frequently (F), occasionally (O), seldom (S), or never (N).

- A F O S N . . . 1. He makes his attitudes clear to the staff.
- A F O S N . . . 2. He does personal favors for staff members.
- A F O S N . . . 3. He tries out his new ideas with the staff.
- A F O S N . . . 4. He does little things to make it pleasant to be a member of the staff.
- A F O S N . . . 5. He rules with an iron hand.
- A F O S N . . . 6. He is easy to understand.
- A F O S N . . . 7. He criticizes poor work.
- A F O S N . . . 8. He finds time to listen to staff members.
- A F O S N . . . 9. He speaks in a manner not to be questioned.
- A F O S N . . . 10. He keeps to himself.
- A F O S N . . . 11. He assigns staff members to particular tasks.
- A F O S N . . . 12. He looks out for the personal welfare of individual staff members.
- A F O S N . . . 13. He works without a plan.
- A F O S N . . . 14. He refuses to explain his actions.
- A F O S N . . . 15. He maintains definite standards of performance.
- A F O S N . . . 16. He acts without consulting the staff.
- A F O S N . . . 17. He emphasizes the meeting of deadlines.
- A F O S N . . . 18. He is slow to accept new ideas.
- A F O S N . . . 19. He encourages the use of uniform procedures.
- A F O S N . . . 20. He treats all staff members as his equals.
- A F O S N . . . 21. He makes sure that his part in the organization is understood by all members.
- A F O S N . . . 22. He is willing to make changes.
- A F O S N . . . 23. He asks that staff members follow standard rules and regulations.
- A F O S N . . . 24. He is friendly and approachable.
- A F O S N . . . 25. He lets staff members know what is expected of them.
- A F O S N . . . 26. He makes staff members feel at ease when talking with them.
- A F O S N . . . 27. He sees to it that staff members are working up to capacity.
- A F O S N . . . 28. He puts suggestions made by the staff into operation.
- A F O S N . . . 29. He sees to it that the work of staff members is coordinated.
- A F O S N . . . 30. He gets staff approval on important matters before going ahead.

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**DRAKE UNIVERSITY**

DES MOINES, IOWA 50311

COLLEGE OF EDUCATION

February 1974

Dear Educational Colleague:

A study of educational leadership in Iowa is being conducted through the Department of Educational Administration at Drake University. The study is related to the leadership behaviors of public school superintendents. In January, your superintendent participated in the first stage of the study by answering a career patterns questionnaire.

For the second stage of the study, selected school personnel are being asked to respond to the questionnaire enclosed. Please take a few minutes to fill out the questionnaire and return it in the postage-paid envelope provided. Those few minutes of your time will be a valuable contribution to the study of educational leadership in Iowa. To assure objectivity, please do not discuss your answers with others until after it is mailed back.

Only three persons in each sampled district will receive the questionnaire, so it is quite important that the number of returns be as close to 100% as possible. All replies are strictly confidential; no names or places will be mentioned, and no one except those conducting the study will have access to the data.

The study of leadership in the Iowa superintendency promises to be an interesting one. Let me take this opportunity to thank you in advance for your participation.

Sincerely,

Leland Wolf  
Graduate Student  
Education Administration

Enclosure

APPENDIX B  
CORRELATION SCATTERPLOTS

Figure 2

Relationship Between Years in Present Position  
and Age at First Superintendency for Iowa  
Career- and Place-Bound Superinten-  
dents, 1973-74 School Year

C		P	
I	A	I	A
II	III	IV	V
VI	VII	VIII	IX
X	XI	XII	XIII

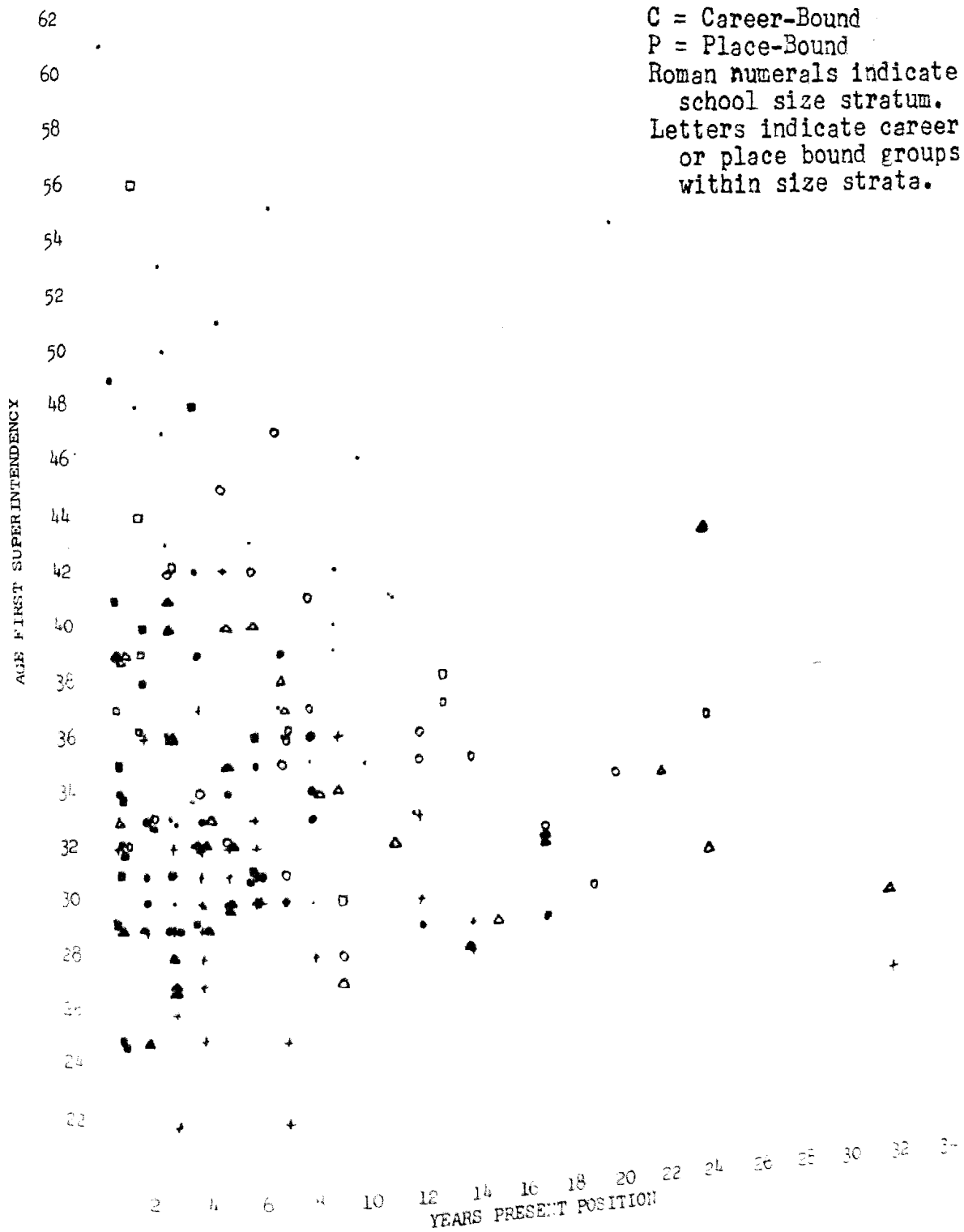


Figure 3-

Relationship Between Years in Present Position  
and Structure Scores of Iowa Career-  
and Place-Bound Superintendents,  
1973-74 School Year

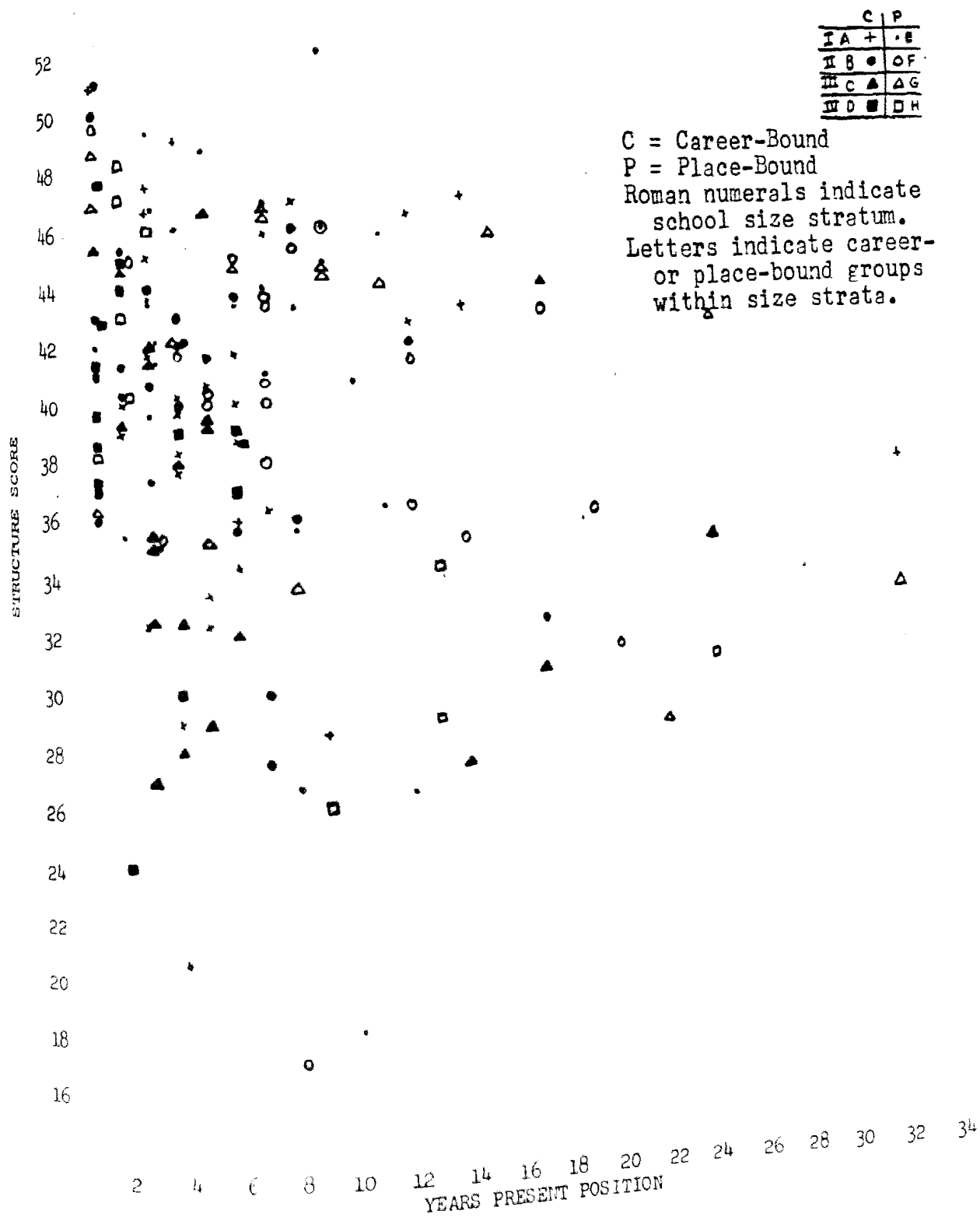


Figure 4

Relationship Between Years in Present Position  
and Consideration Scores of Iowa Career-  
and Place-Bound Superintendents,  
1973-74 School Year

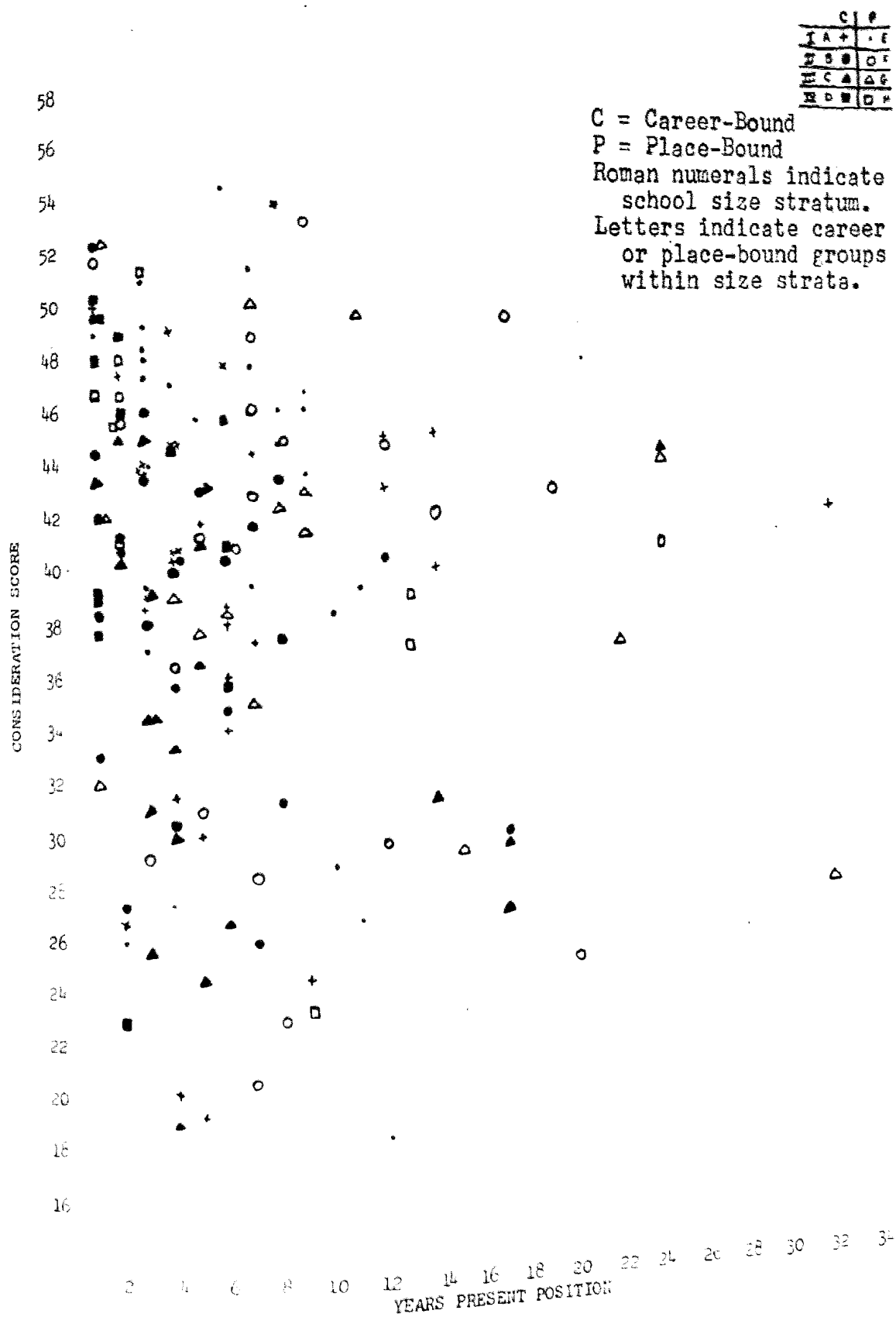


Figure 5

Relationship Between Years in Present Position  
and Total LBDQ Scores of Iowa Career- and  
Place-Bound Superintendents, 1973  
-74 School Year

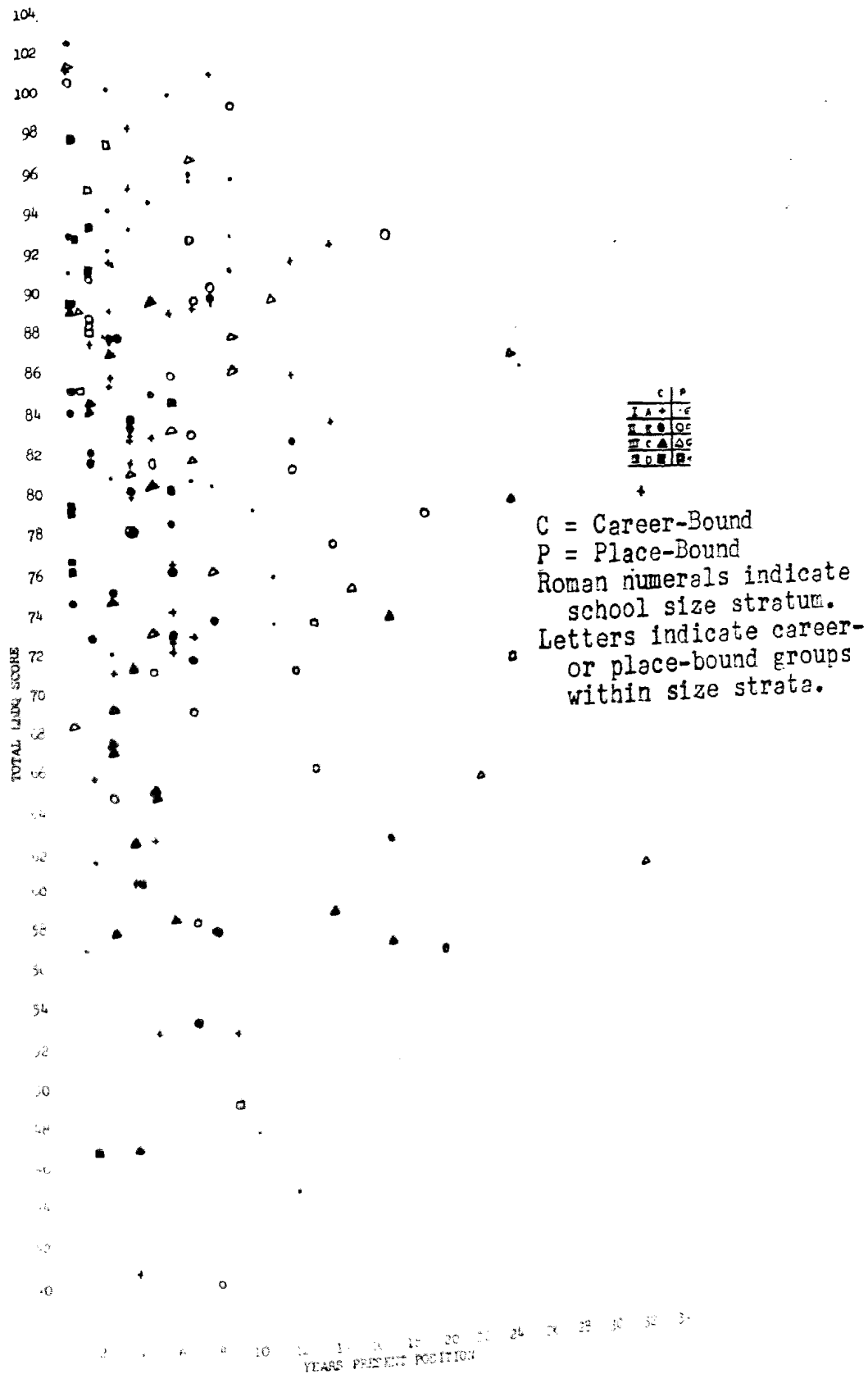


Figure 6

Relationship Between Age at First Superintendency  
and Structure Scores of Iowa Career- and  
Place-Bound Superintendents,  
1973-74 School Year

C/P	I	II	III	IV
A	B	C	D	E
F	G	H	I	J

C = Career-Bound  
P = Place-Bound  
Roman numerals indicate  
school size stratum.  
Letters indicate career-  
or place-bound groups  
within size strata.

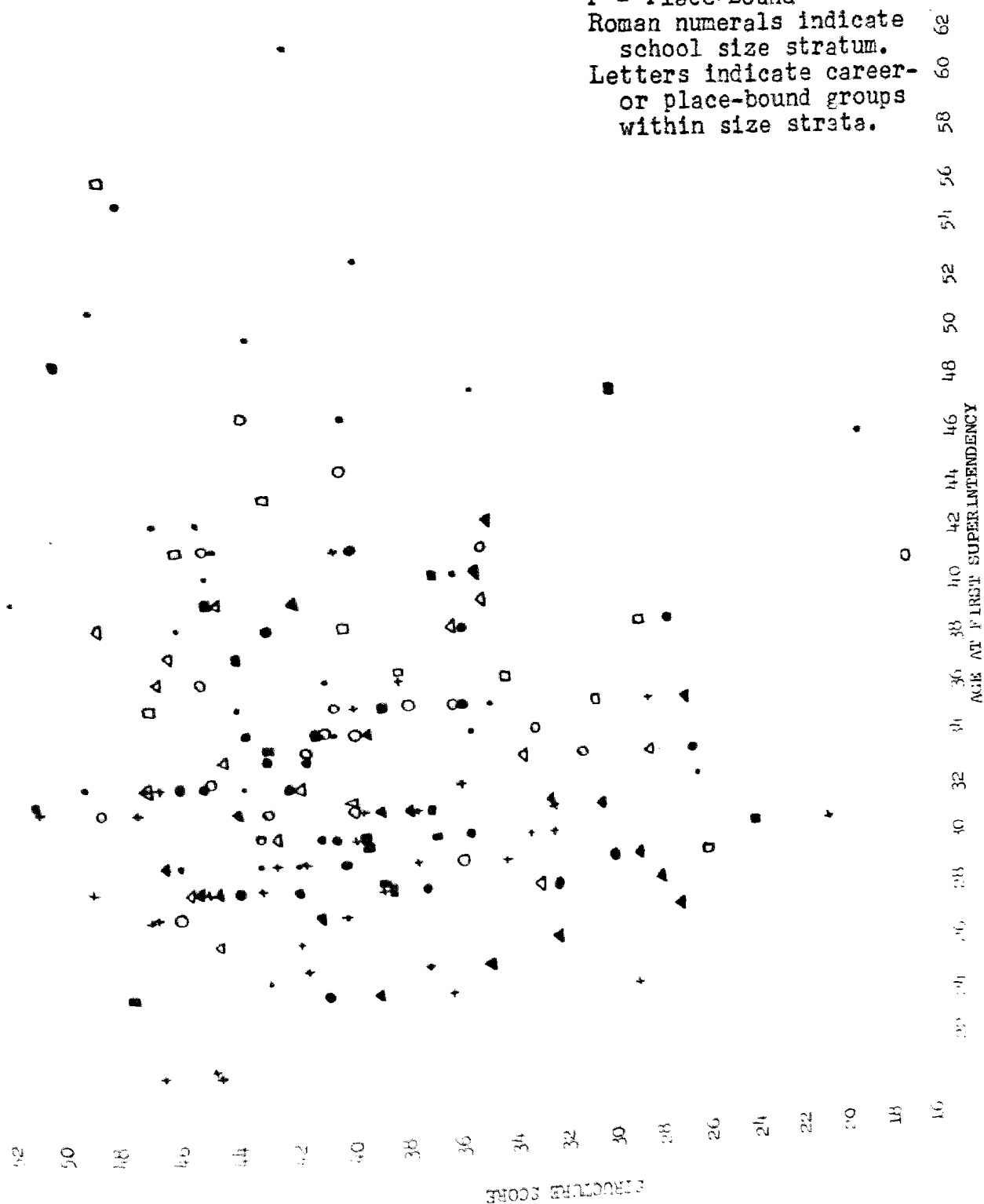


Figure 7

Relationship Between Age at First Superintendency  
and Consideration Scores of Iowa Career- and  
Place-Bound Superintendents, 1973-  
74 School Year

C	P	
	I	II
A	+	•
B	•	•
C	•	•
D	•	•
E	•	•

C = Career-Bound

P = Place-Bound

Roman numerals indicate  
school size stratum.

Letters indicate career-  
or place-bound groups  
within size strata.

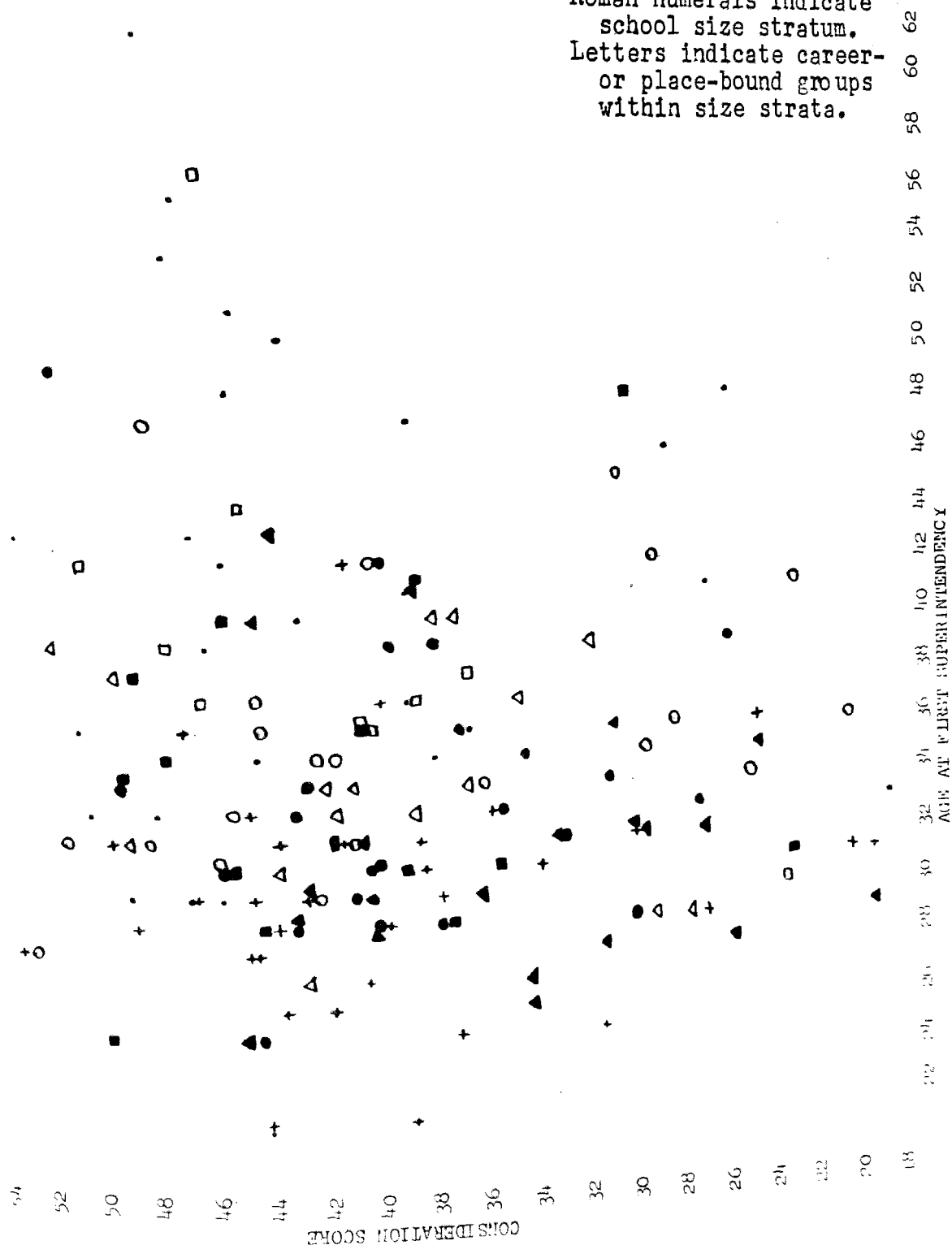




Figure 8.

Relationship Between Age at First Superintendency  
and Total LBDQ Scores of Iowa Career- and  
Place-Bound Superintendents, 1973-  
74 School Year

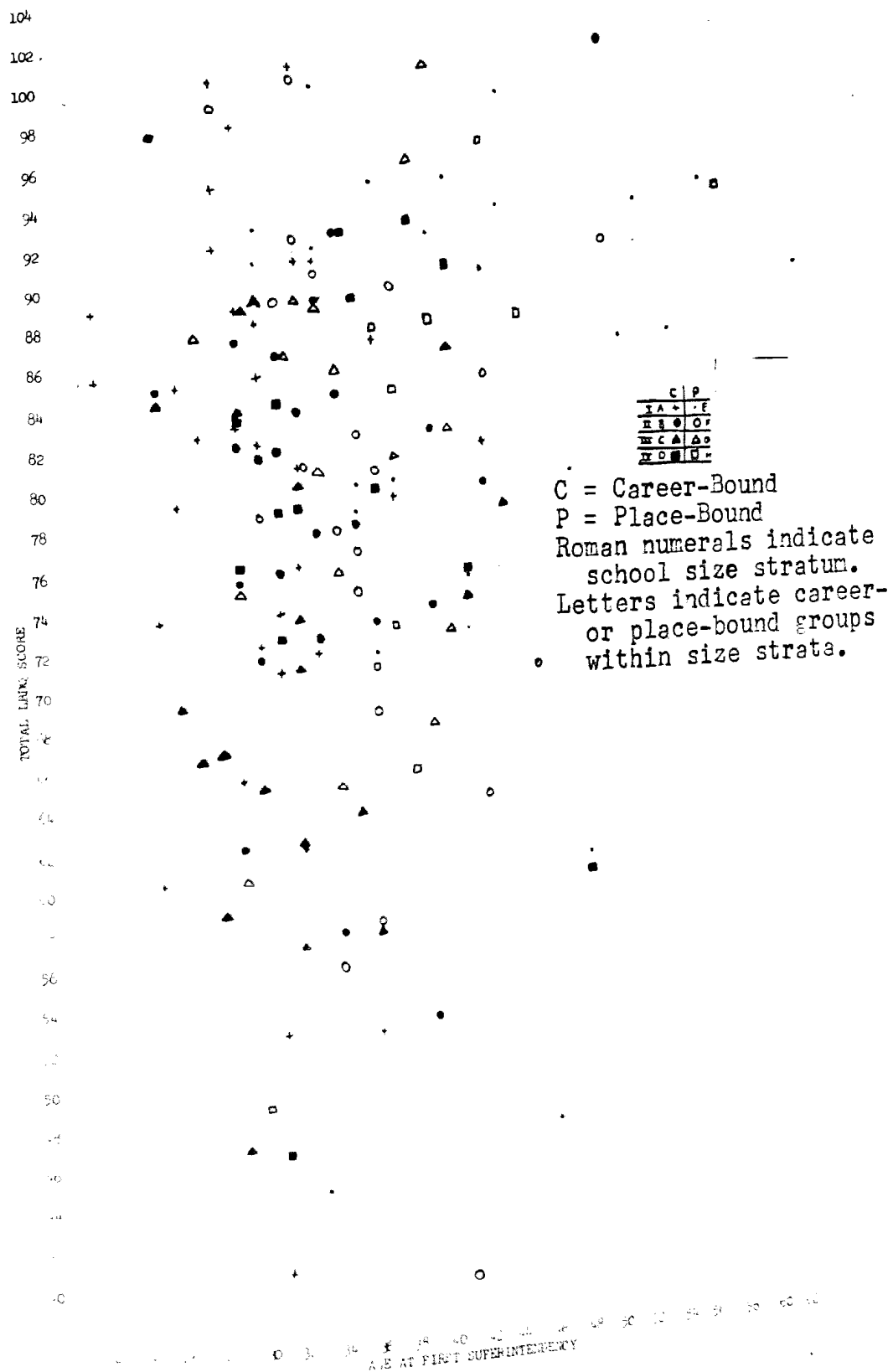


Figure 9

Relationship Between Structure and Consideration  
Scores of Iowa Career- and Place-Bound  
Superintendents, 1973-74  
School Year

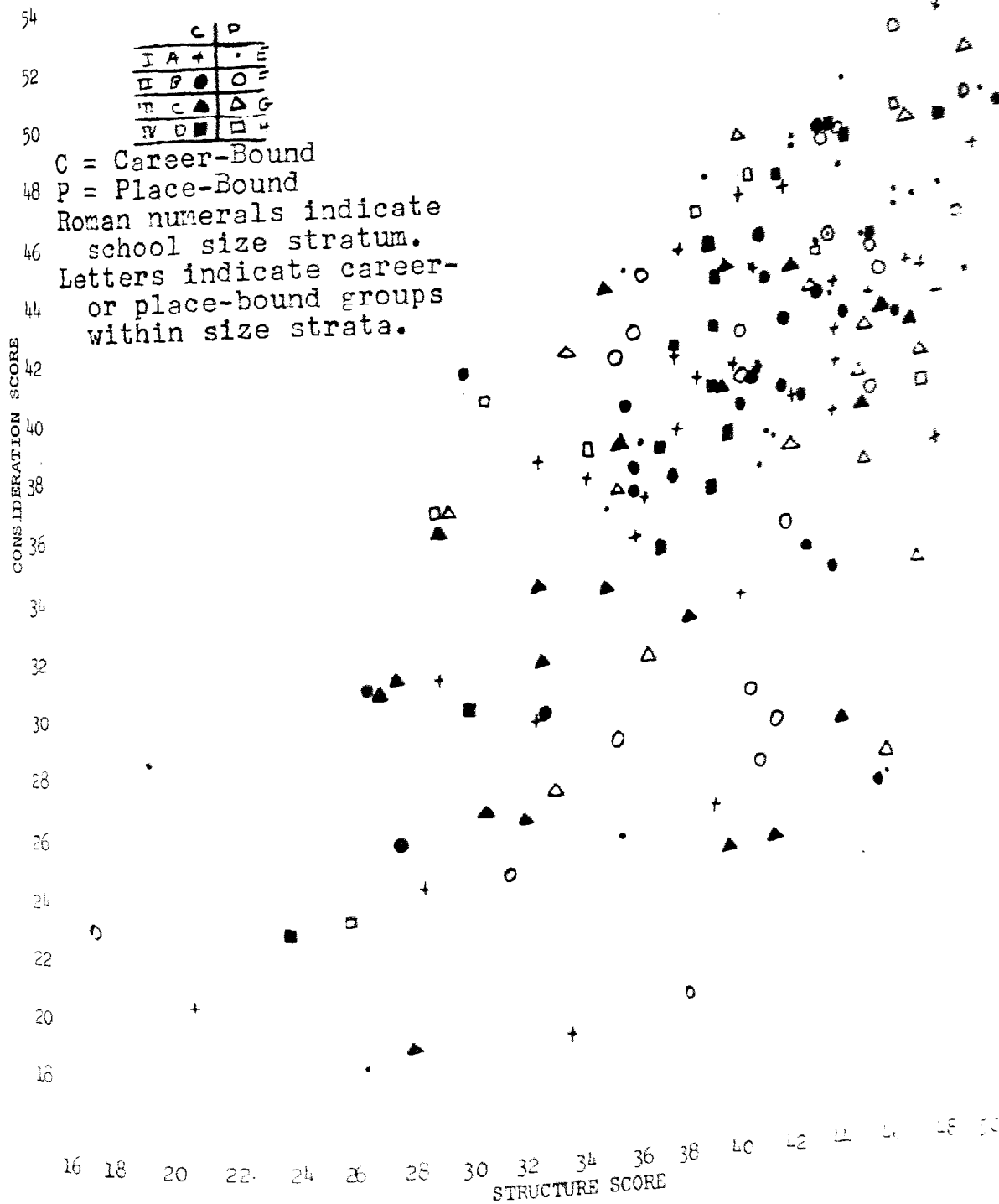


Figure 10

Relationship Between Structure and Total LBDQ  
Scores of Iowa Career- and Place-Bound  
Superintendents, 1973-74  
School Year

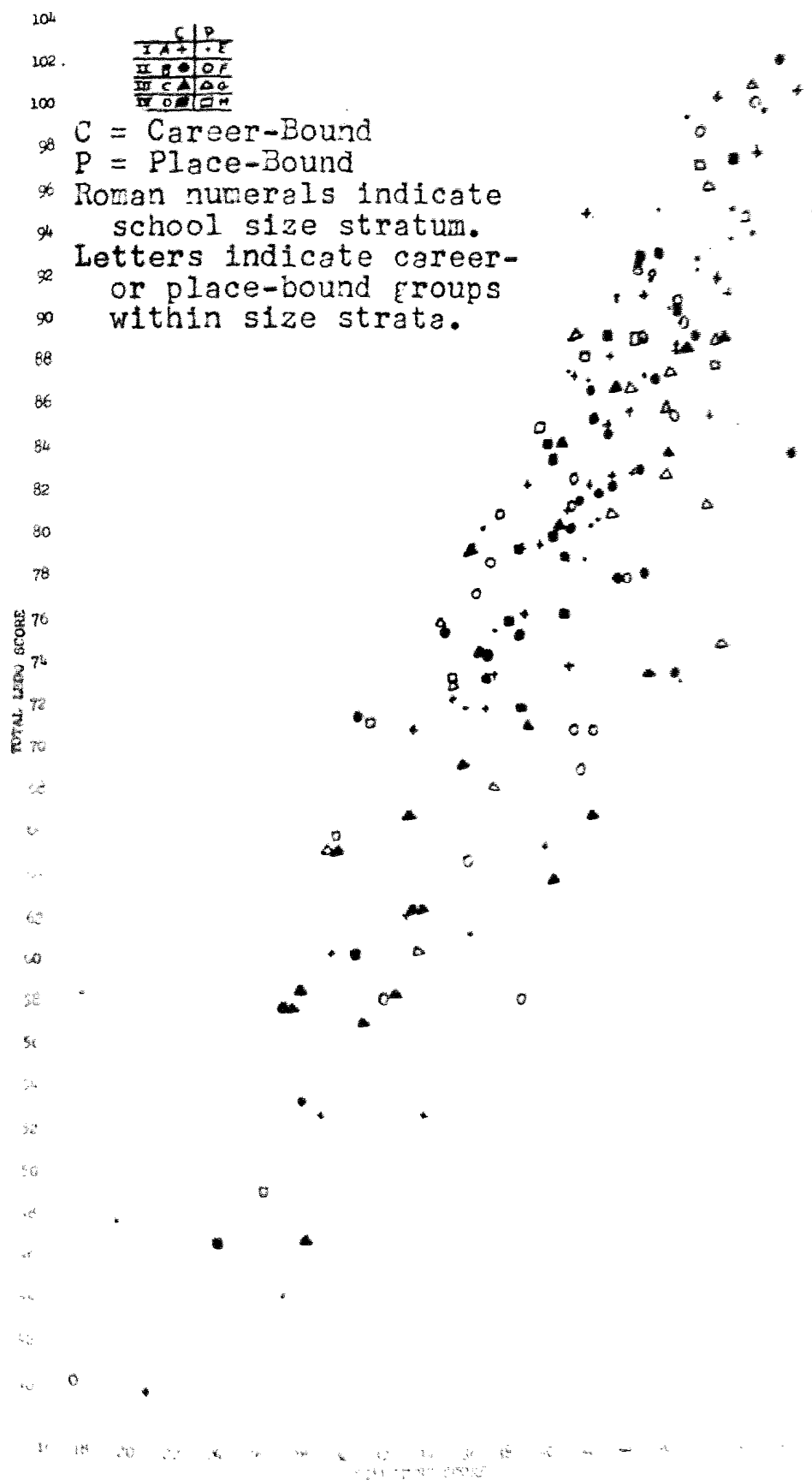


Figure 11

Relationship Between Consideration and Total LBDQ  
Scores of Iowa Career- and Place-Bound  
Superintendents, 1973-74  
School Year

